

COASTAL AREA DEVELOPMENT PLAN
for the
Saginaw River Environs
of the

Township of Carrollton

Task No. 5D-7.3



A. Howard Kunding
ASSOCIATES
PLANNING & DEVELOPMENT CONSULTANTS
P.O. BOX 1142
SAGINAW, MICHIGAN 48606

COSTAL AREA DEVELOPMENT PLAN

for the
SAGINAW RIVER ENVIRONS
of the
TOWNSHIP OF CARROLLTON

August 1983

Prepared by:

Township of Carrollton
1645 Mapleridge Road
Saginaw, Michigan 48604

With Professional Assistance of:

A. Howard Kunder Associates
Planning and Development Consultants

Post Office Box 1142
Saginaw, Michigan 48604

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COASTAL AREA PLANNING PROJECT

TOWNSHIP of CARROLLTON

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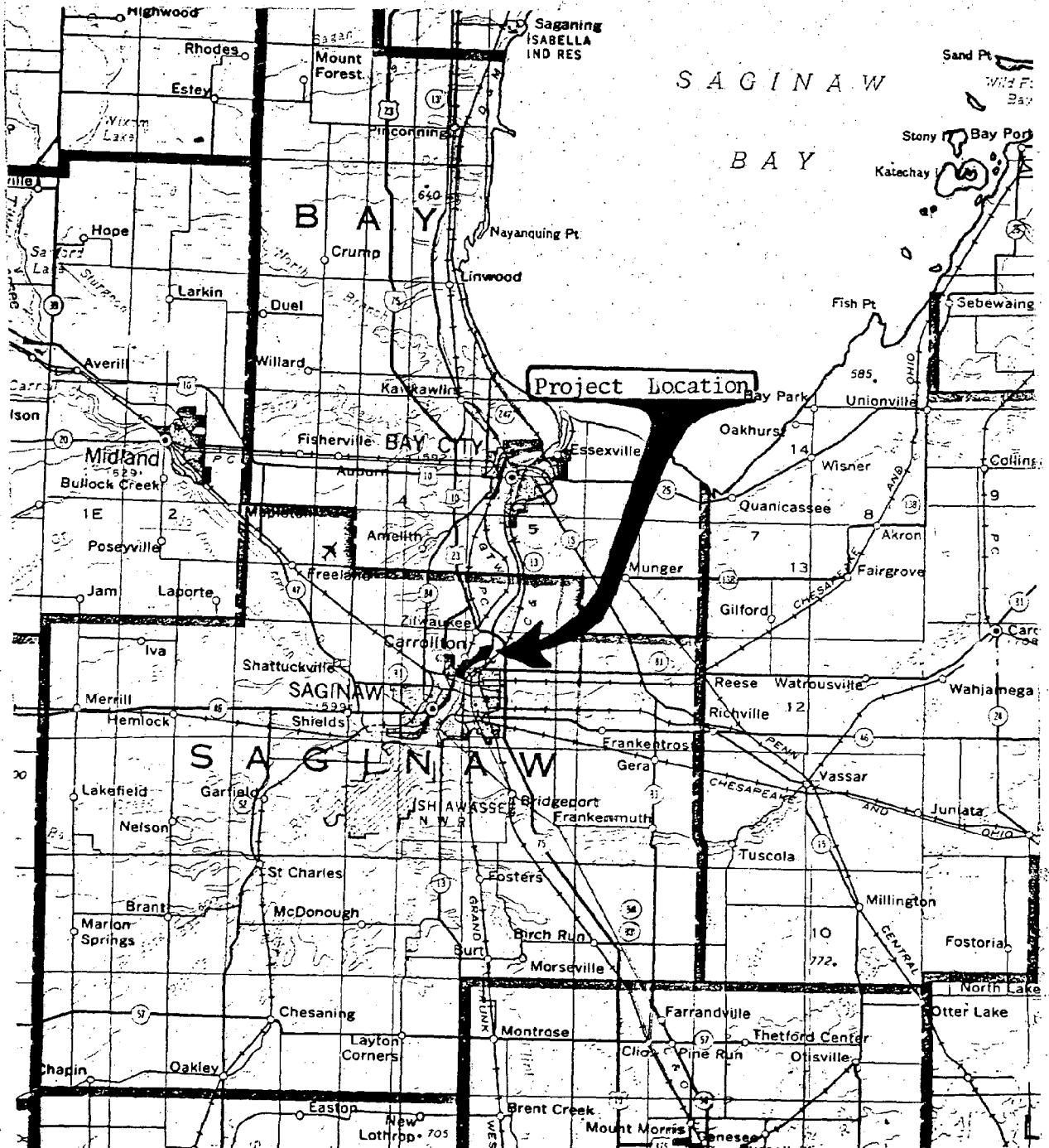
PURPOSE OF STUDY

This study is funded in part (50%) by a grant from the National Oceanic and Atmospheric Administration of the Federal government to the Land Resources Division of the Michigan Department of Natural Resources. The state agency has then subcontracted with the Township of Carrollton for this specific study. The general purpose of the federal government in funding these projects is to address concerns with the natural, commercial, recreational, industrial and aesthetic resources of coastal areas in terms of present and future public value for their utilization. The specific purpose of this Carrollton project is to focus on the riverfront & Carrollton Road area, including the Carrollton Bar (island), in formulating a planning program that will help guide future economic, social and recreational development.

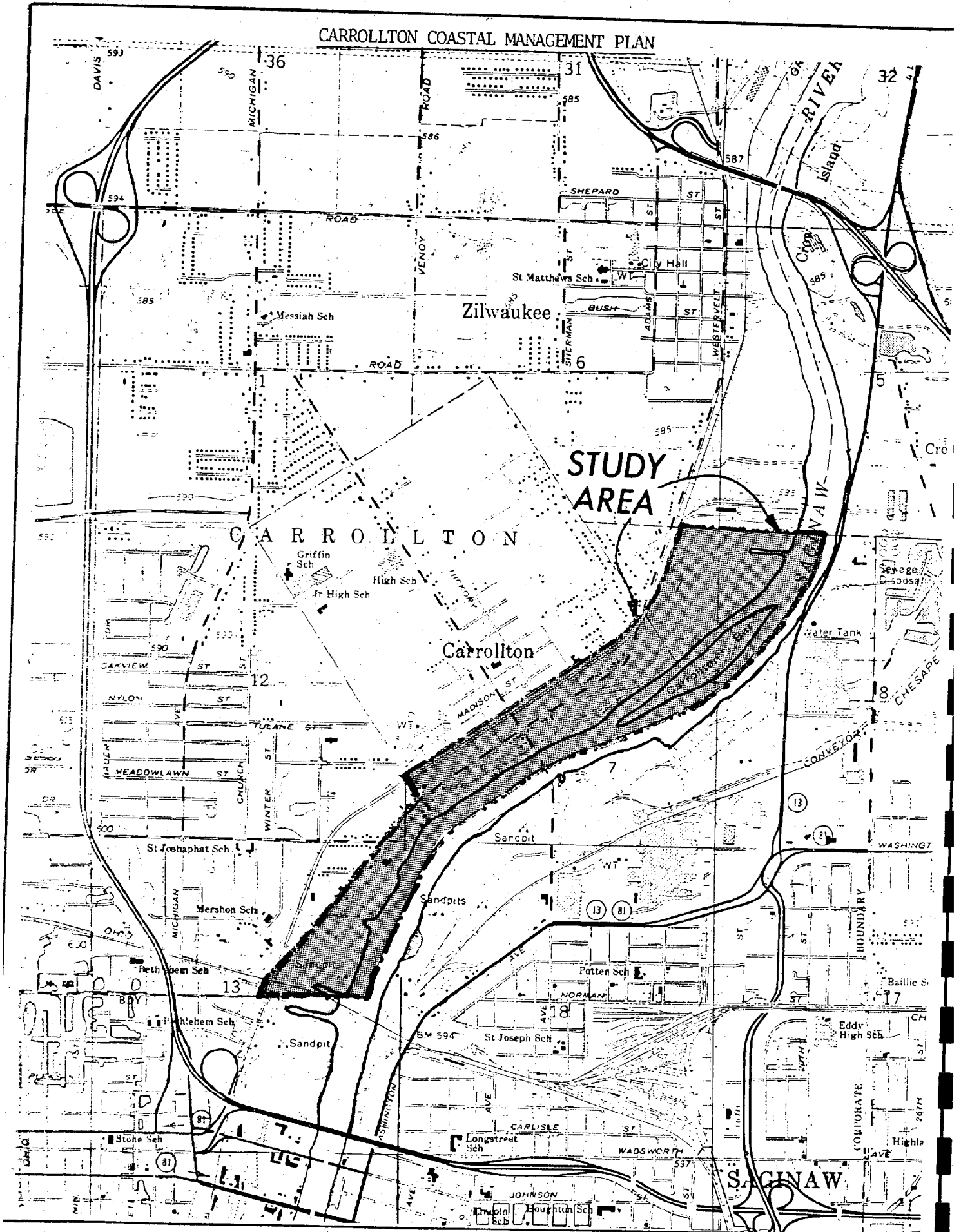
This document then, provides the formal summary and results of the project. However, the function of this document is to also provide for a rational, well-informed, decision-making process beyond this document so that it can lead to implementation of this plan.

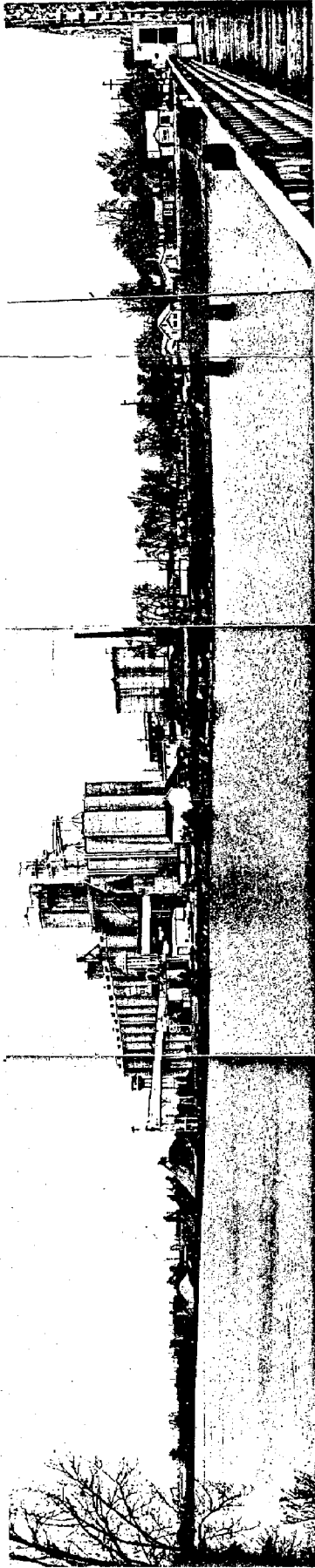


COASTAL AREA DEVELOPMENT PLAN
TOWNSHIP OF CARROLLTON
PROJECT LOCATION MAP

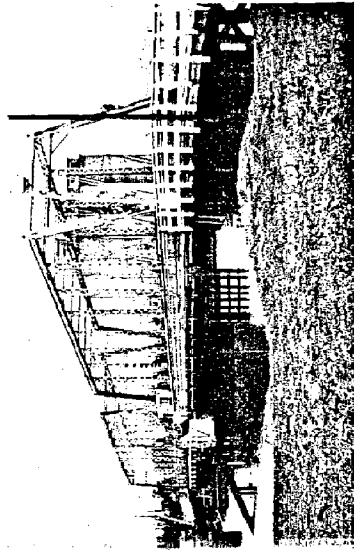


CARROLLTON COASTAL MANAGEMENT PLAN

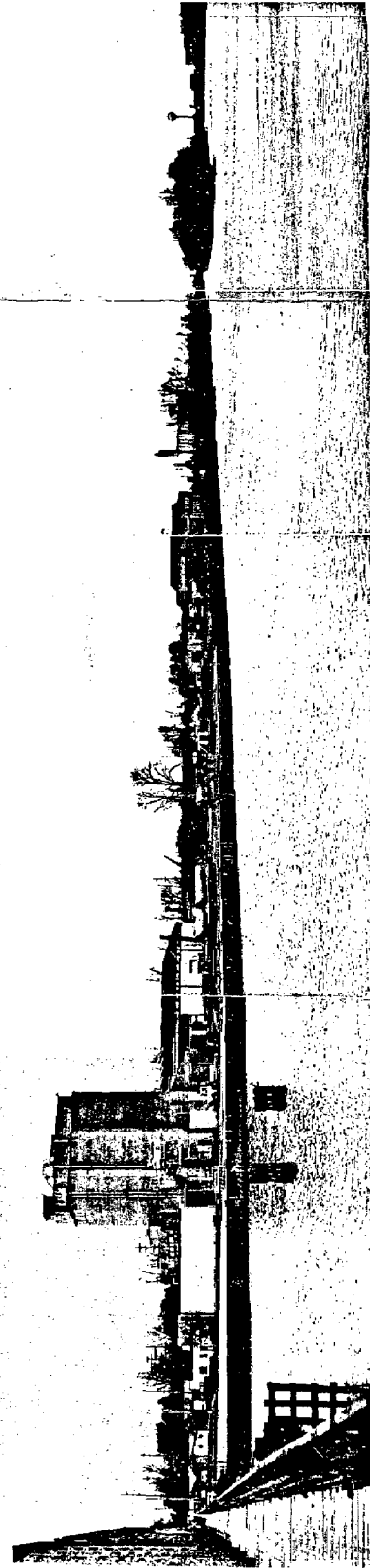




VIEWS OF SAGINAW



RIVER IN CARROLLTON



CARROLLTON TOWNSHIP COASTAL MANAGEMENT PLANNING PROJECT

A. Howard
Kindinger
ASSOCIATES

P.O. BOX 1-42



PART I: COASTAL AREA INVENTORY

PART I: COASTAL AREA INVENTORY

This part of the study includes a detailed examination of the principal characteristics of the coastal planning area. The study focuses on essentially five areas of interest. These are land use, transportation linkage and urban design, natural resource limits, the overall structure of the area through a plan view and the neighborhood -recreation business markets. Each of these is individually discussed in this part.

In addition, there is a brief discussion of the implications or key conditions in formulating a general development plan. These implications generally look for the opportunities afforded by conditions as well as the limitations that may be imposed by the same conditions.

The function of this part of the study is to present a comprehensive, quantified and rational base on which to build the decisions and plans. Each of the five areas of interest are discussed below.

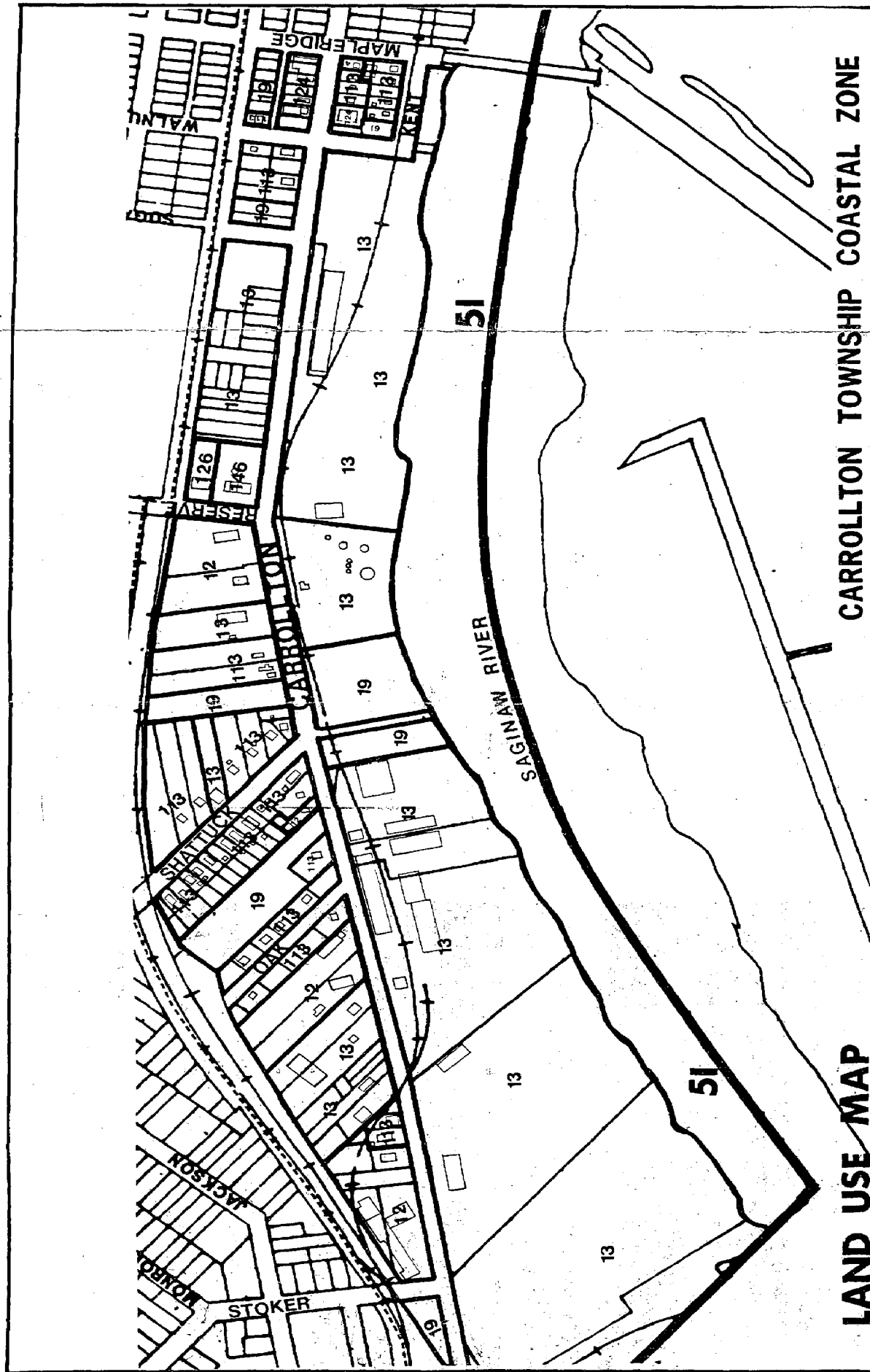
A. Existing Area Land Use Inventory and Trends

A land use inventory was conducted according to the Michigan Resource Inventory Act specifications so that the resource is consistent with the statewide system. The land use inventory is portrayed on the following fold-out maps. The results of this inventory can also be summarized as follows:

<u>Land Use Classification</u>	<u>Approximate Acres</u>	<u>% of Total Area</u>
113 Single/Two Family	22.8	7.9%
12 Commercial, Services, Institutional	9.4	3.3
124 Secondary Neighborhood Business	2.3	0.8
126 Institutional	0.5	0.2
13 Industrial	143.9	49.9
146 Utilities	1.2	0.4
19 Open Land, Others	14.2	4.9
31 Herbaceous Land	50.4	17.5
41 Deciduous Cover	26.9	9.3
51 Stream, Waterway		-
621 Aquatic Bed Wetland	16.9	5.8
TOTAL	288.5	100.0

SOURCE: Field Survey, July 1983

An examination of this data indicates two conditions tend to prevail. Either the land is rather intensively developed with large, complex uses or is rather sparsely developed. The map also shows that the two principal areas of undeveloped property are at the foot of Shattuck Road at the Saginaw River and in the northeasternmost part of the Township and study areas. It should be noted that none of the study area is natural in the sense that the topography and biota resembles pre-civilised conditions. Virtually the entire riverfront has had extensive land filling, historic development and river dredging.

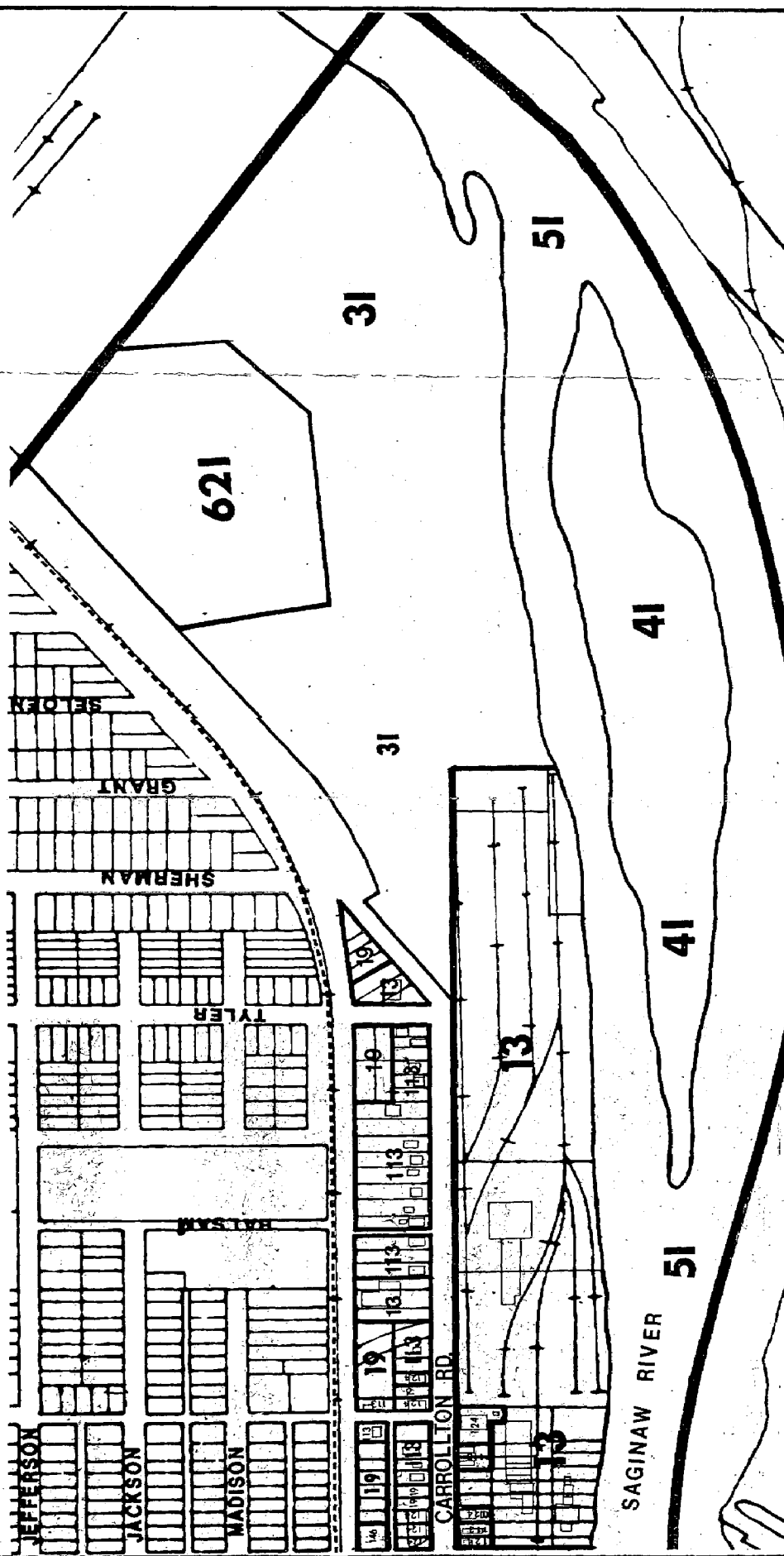


LAND USE MAP

CARROLLTON TOWNSHIP COASTAL ZONE

A. Howard
Kundinger
 ASSOCIATES

P.O. BOX 1143
 LANSING, MICHIGAN 48206



LAND USE MAP

CARROLLTON TOWNSHIP COASTAL ZONE

A. Howard
Kundinger
 ASSOCIATES
 P.O. BOX 1142
 SAGINAW, MICHIGAN 48606

Trends in the land uses along the river have been generally stable over the past decade in terms of the classifications of operating businesses. One business changed ownership and became a major scrap yard (Surath-Luntz) instead of the former Ogelbay Norton Co. Dock. Another, the now Pillsbury elevator had a major expansion in 1980. Otherwise changes have been very minor.

A major potential change would be the construction of a Shattuck-Washington Bridge across the Saginaw River. Such a bridge could carry up to 22,000 trips per day. This would tend to make Shattuck Road, and its intersection with Carrollton Road in particular, more amenable to highway-oriented consumer retail and services. Although the bridge is considered a local priority, the complexity of its design, construction and especially its cost make it probable that it is at least ten years into the future.

B. Transportation Linkage

Railroads

The Carrollton Township coastal area is an intensive location of transportation corridors, intermodal transfers points, and terminal operations. The key transportation characteristics include these railroad tracks:

- Grand Trunk Western railroad tracks that essentially parallel the the Saginaw River and include numerous sidings. Basically it is a double track system with one set of tracks (the easternmost) originally operated by Penn Central. The tracks weave as does Carrollton Road so that they intersect twice.
- Chessie System railroad tracks cut across the southernmost portion of the coastal area including a Saginaw River railroad bridge that is no longer opened for routine river traffic and is thus essentially the southernmost terminus of the coastal area. These tracks do intersect the Grand Trunk Western tracks.

Streets and Roads

Street and highway circulation is also important in the coastal area. The major streets and highways include these:

- Carrollton Road is an all-weather county primary road that is classified as a principal arterial on Saginaw County planning and Township planning documents. It is primarily a truck and auto corridor for the major commercial and industrial activities along the river, but has important connections near the I-75 freeway-City of Zilwaukee interchange. It is a two lane, asphalt road with shoulders rather than curb and gutter. It carries an average daily traffic volume of 1,700 vehicles south of Shattuck and 2,160 vehicles north of Sherman. The average daily traffic at Mapleridge is approximately 6,500 vehicles. It has a very high percentage of trucks (estimated at about 35%). There are 3 railroad crossings of the road in the Carrollton Township.

- Shattuck Road enters the coastal area from the west and terminates at Carrollton Road. It is a principal arterial that carries 6,000 vehicles east of Michigan Avenue. Shattuck is a two lane asphalt surfaced road.

- Weiss Street is a minor arterial that also enters the coastal zone from the west and terminates at Carrollton Road. It is located at the extreme southern edge of the township at the Saginaw City Limits. Its traffic is estimated at about 1,200 vehicles per day.

- Mapleridge Road is a county primary road and minor arterial in Carrollton Township. At its intersection with Carrollton Road it is the only site of a traffic signal in the coastal zone. It is also unique in that it is the Carrollton connection for the only road crossing of the Saginaw River in the Township. It connects to the Sixth Street Bridge and the Fifth-Sixth one-way system in the City across the river. The bridge carries 7,200 vehicles per day and is a swing-span bridge dating from the 1890's.

- Sherman Road connects with Carrollton Township near the northern edge of the coastal area. This low-volume, two-lane asphalt road is county primary road that functions as a collector that connects with Schust and Tittabawassee Roads in the City of Zilwaukee.

The roads that connect Carrollton to the rest of the metropolitan area are Weiss, Shattuck, Tittabawassee and Sixth-Mapleridge all of which terminate at or intersect Carrollton Road. Close connection to the I-75 freeway is provided by Carrollton and Tittabawassee Roads while Weiss and Michigan

Avenue provide good access to the I-675 freeway.

Riverport

The only other major transportation system that impacts the coastal area is riverport traffic on the Saginaw River. The port is used principally for agricultural grains, stones and aggregate, sand and agricultural products.

Between 1980 and 1981 the number of ships entering the port declined. Foreign vessels of oceanic capacity numbered eight in 1981, while 63 lakers entered the port. Ten foreign ships and 72 lakers entered the port in 1980. Shipments of coal and grain declined to a level of 30.9 million tons and 18.3 million tons, respectively. Iron ore tonnage increased from 66.6 million tons in 1980 to 74.4 million tons in 1981. A study of the development potential for the Saginaw River Port predicts that 6,000,000 cargo tons annually could be shipped by the year 2000, and that tonnage could double again by the year 2020. These predictions are based on the assumption that the Bay channel depth will be increased and that additional grain, fertilizer and pellet handling facilities will be provided.

The U.S. Department of Transportation continues to maintain the Saginaw River Dredging Project. The Army Corps of Engineers is responsible for the annual dredging from Middle Ground in the Saginaw Bay, upstream to the Sixth Street Bridge in Saginaw. The authorized project depth is 27 feet from Middle Ground to the mouth, 26 feet upstream to the Mackinaw Railway Bridge, 25 feet to the Penn Central Bridge and 22 feet to the Chesapeake and Ohio Bridge in Saginaw.

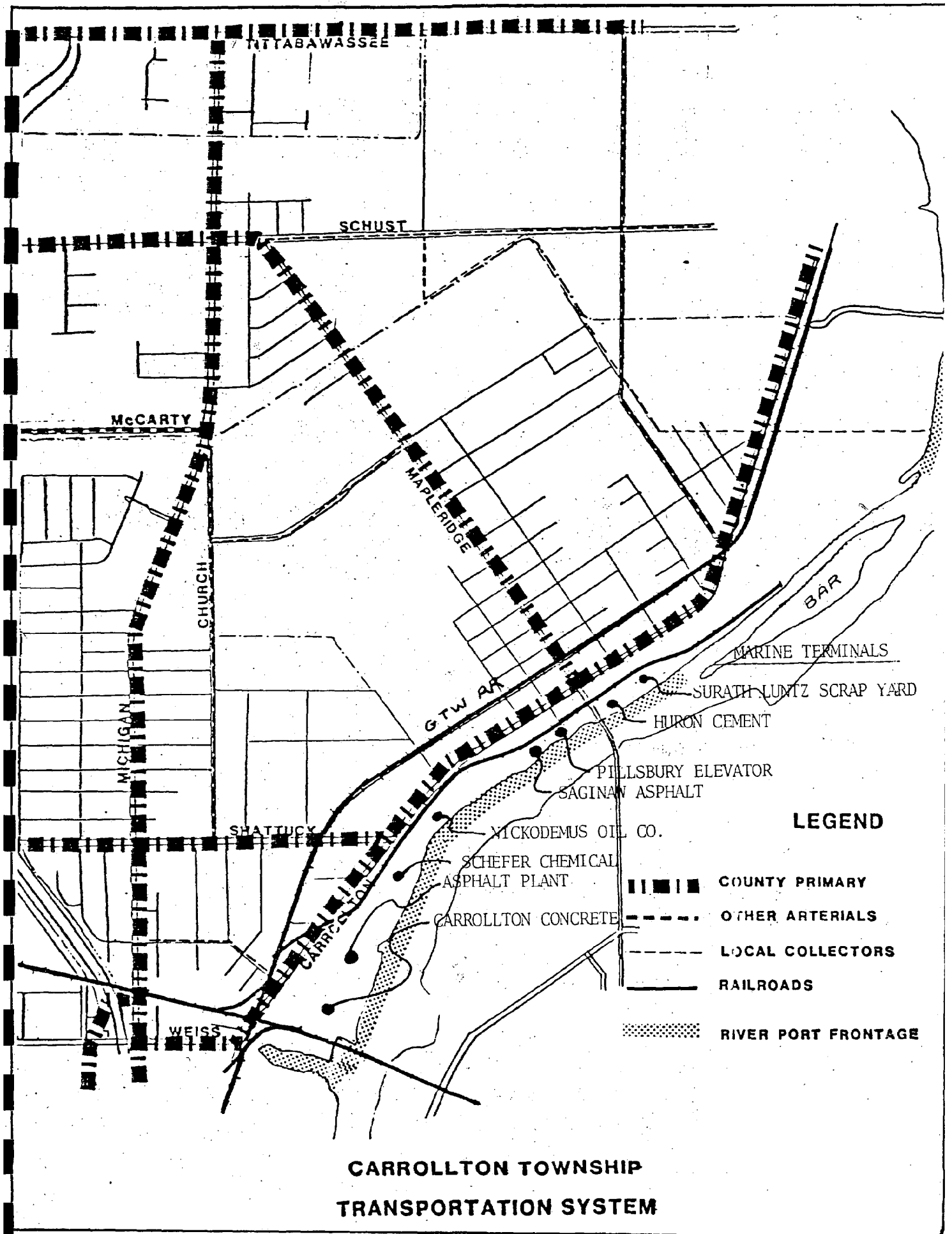
The major river port terminals in Carrollton Township are listed from northernmost to southernmost below:

- Surath-Luntz Scrap Yard with approximately 1,000 lineal feet of channel and dock frontage.
- Huron Cement Division of National Gypsum with about 500 lineal feet of frontage.
- Pillsbury Edible Protein Division Grain Elevator with an estimated 800 lineal feet of channel frontage.
- Saginaw Asphalt Paving Company Stone Dock has a channel frontage of 700 lineal feet.
- Nickodemus Oil Company with Marathon Oil has a tank storage area of about 7 acres with about 500 feet of frontage.
- Schaefer Chemical Products Company with nearly 600 feet of frontage for agricultural chemicals.
- Carrollton Concrete Products sand and stone terminal with more than 1,500 lineal feet of frontage. The "property" is actually owned by two separate corporations and one is used for an asphalt plant and another for a concrete plant.

Other river shipping terminals in the City of Saginaw include Central Foundry Division of General Motors, Agrico Fertilizer, Saginaw Rock Products, and the City of Saginaw salt storage site. The Sixth Street Bridge opened for river traffic 124 times during the 1982 shipping season. The shipping season generally runs from May to November each year.

With the Central Foundry Division discontinuing use of the "Niagara" sand sucking ship for its purposes, the openings of the Sixth Street Bridge and total river traffic are expected to decline significantly.

A map outlining the basic transportation corridors and terminals follows this page.



Design Impact

The intensity of these transportation terminals in the river, the railroad tracks, the truck route and major industrial character make Carrollton Road a very stark corridor. From an urban design standpoint it has several major problems as follows:

- A relatively narrow (generally 66') right-of-way directly bordered by an adjacent railroad-right-of-way most of its length.
- Several railroad intersections that require skewering the road approaches and making for awkward grades. In addition there are a number of drive approaches and areas where geometrics are difficult for trucks and goods being moved.
- Intense land uses that virtually "spill over" into the right-of-way in terms of land surface.
- A fractured right-of-way visual pattern that includes non-road portions of the right-of-way being alternatively grass, gravel, paved, stone or weeds.
- Very awkward cross-section of Carrollton Road through the Mapleridge Carrollton business area.
- Generally a "hard" visual appearance with major, large scale structures in close proximity to the right of way.
- Strong visual images from major overhead utility wires.

A schematic commentary of the transportation design character of Carrollton Road is shown in Part V of this report. Because of the limited right-of-way, any corridor beautification or urban design will require a rather simple, direct and hardy system. Some additional controls, however, may be possible over future private land development thru site-plan approval.

C. Natural Resource Limits

There are a number of significant natural resource and environmental limits in the coastal management area. The major limits identified include these:

- The Saginaw River floodway and 100 year probability flood plain dominate much of the coastal area. This provides limits on the potential future utilization of these areas. In general, recommendations will be based on the assumption that the flood plain should normally be developed only with compatible, non-intensive uses.
- There is a significant wetland located on the northern end of the coastal area. It supports a 20+ acre herbaceous cattail marsh. If possible, this wetland should be protected.
- The only major wooded properties in the study area include the Carrollton Bar and some adjacent shorelands. These woods total less than an estimated twenty acres, and are otherwise isolated within an urban area.
- The water quality of the Saginaw River itself is a limiting factor. A 1977 study of the East Central Michigan Planning and Development Region identified the overall water quality as an index rating of 56, which is classified as "Medium". The river is accordingly predominately classified as "For Partial Body Contact". The Michigan Department of Natural Resources has also issued a public health advisory reading "Do not eat any fish" for the entire length of the Saginaw River. This is because of identified chemical contaminants. These do limit the extent and character of recreational use of the Saginaw River.
- Air quality in the area north of the Sixth Street Bridge is currently designated as a "Not-Attainment Area for Total Suspended Particulates, Primary Standard". However, during 1983 it is recommended by the Air Quality Division that this entire designation be eliminated. The entire coastal zone area, would still be a "Non-Attainment Area for Total Suspended Particulates, Secondary Standard". This is principally because of the foundries across the river, but Pillsbury in Carrollton has been cited as a contributor to the problem. During 1983, Pillsbury initiated additional steps to control its particular contribution.
- Noise is a major factor for approximately the northern third of the coastal area. The noise comes from across the Saginaw River in the City of Saginaw. The source is the large nodular iron foundry. As actual decibel reading was not made, but it is clear and continuous.

In addition, coordination was made with the Michigan Natural Features Inventory Program of the Michigan Department of Natural Resources as well as local research to determine the composition and character of the aquatic biota, wetland and common vegetation and wildlife of the area. The results

of that inquiry and research are included in an appendix listing. It should be noted, however, that no known threatened or endangered species live in or frequently visit the coastal area.

D. Plan View of the Area

The total area of the coastal area in Carrollton Township is approximately 300 acres along approximately 13,700' of Saginaw River frontage. The area, as indicated earlier is diverse with residential, commercial, industrial and open land uses. On a following map, the key land uses and structures are identified. Generally the parcels west of Carrollton Road are smaller and more numerous while the riverfront parcels are larger, most are large enough to accommodate docks.

Review of Unused Parcels

As can be seen, there are two major parcels that are not used for any urban purposes. These two parcels both are located on the river. The northernmost parcel (actually 2 parcels) is actually located off of Seaway Drive, which is an access road paralleling Carrollton Road. It is a large area containing an estimated 82 acres with about 2,200' of frontage along Seaway Drive and 3,500' of river frontage. This area also includes the Carrollton Bar which includes about 18 acres of that land with about 9,800' of its own river bank. The bar (island) is principally wooded with wetland vegetation including willows, sycamore, swamp white oak, white cedar and

black ash trees. The mainland has an estimated 20-25 acres of cattail marsh, 25 acres of grassland and brush and 3 acres of similar wetland woods. The shipping channel for the Saginaw River is east of the bar so that the 100' + channel between the bar and mainland does not support shipping or riverside docks. Both the bar and the riverbank for a depth of several hundred feet appear to have been used for deposit of river-dredging spoils several decades ago. Several cable tie-ups remain on the eastern shore of the bar. The site does not have immediate access to any municipal water or sanitary sewers. The cattail marsh could be described as a major wetlands area that is environmentally sensitive. The parcel is owned by the adjacent Surath-Luntz Scrap Yard.

The second open-space area on the river is an approximate 5 acre parcel on Carrollton Road at the terminus of Shattuck Road. This is a semi-maintained grassland with a number of individual trees on it. It has an almost park-like atmosphere to it. A railroad track separates the parcel from Carrollton Road. The parcel, though, would be at least partly required for the alignment of a proposed Shattuck Road bascule bridge across the Saginaw River. The long-planned bridge will replace the now functionally-obsolete Sixth Street Bridge. This parcel is currently owned by the Saginaw County Road Commission.

There are a number of smaller unused parcels in the coastal area, but these do not have access to the river and are too small to be represent unusual development opportunities. These parcels are most appropriate for small freestanding commercial or small industrial development, although some could be used for residential infill.

One small parcel of the southwest quadrant of the Sixth Street Bridge is not large or significant in character, but it has very high visibility. This parcel could be attractively landscaped for a visual park. The parcel is at an entry point across the river and could be an attractive visual welcome to the Township.

Key Image Makers: Negative Elements

The Carrollton Road corridor and riverbank have very strong visual image makers. Some are positive, but some are negative. Among the key negative elements are these:

- The area is crisscrossed and strung with a large number of utility poles and lines that are an omnipresent visual interference. This is no doubt inevitable because of the higher energy users, but it remains a major negative element.
- Railroad tracks and appurtenances also crisscross and string-out along the corridors. The tracks themselves may create visual distractions, but also the generally unattractive and unmaintained right-of-way is the dominant negative element.
- The actual land uses along the river and road are also major factors. Many of these are large, visually dominating structures, including a grain elevator, a cement terminal, two asphalt plants, a concrete mixing plant, a scrap yard, petroleum storage yards, and several large storage buildings. These are not necessarily unattractive. If painted bright colors, and kept reasonable clean or otherwise maintained well, they can be visually interesting images of an industrialized and urban society.
- The pavement, curb and sidewalks through the Carrollton-Sixth business area are also negative. The road is wide enough but is high-crowned above sidewalk level, has substandard curbing and belies an ad hoc development of the facilities.

Some of these negative elements cannot be readily controlled, while some others can, but at a relatively high capital investment.

Key Image Makers: Assets and Opportunities

While the negative elements in the coastal area are strong and significant, there are a number of important assets and opportunities in the area. These include the following:

- The Carrollton Bar and the nearby wetlands are interesting natural areas that have an unspoiled character but are nonetheless within a large urban area. With some roadside landscaping the area could be attractive from Carrollton Road and Seaway Drive. It is also a major landmark for Saginaw River boaters.
- The open space on Carrollton Road at Shattuck Road provides an attractive vista down to the river. With routine maintenance it could be an excellent asset.
- There are a few architectural landmarks that are significant. Perhaps the most attractive is the historic Cheasepeake and Ohio Recreation Building on Carrollton Road just north of Weiss Street. Though west of the railroad and technically outside the area, it is an important landmark on the coastal corridor.
- A second, but less imposing landmark, is the old Mershon Band-saw Building. The relatively clean, simple structure is not especially unique architecturally, but it is historic as it was the headquarters for the Mershon Lumber Sawmill, and is the site where the band-cutting saw was developed and had a major impact on the lumber era technology. The building has high visibility and could be set off to provide an interesting vista for northbound traffic.
- A number of smaller structures are considerably less significant in size and history, but provide some interest. These include the "Mershon" railroad tower just north of Weiss and an interestingly shaped old gas station at the southeast quadrant of the Carrollton and Mapleridge intersection.
- Some of the large industrial-terminal structures referenced earlier are also major land marks that create visual interest because of their scale and character. These include the Pillsbury elevator, the Michigan Sugar Company and the Huron Cement Terminal.

A photographic summary of these major image-makers is included in Part V of this report.



Old Pere Marquette Railroad Station



Existing Mershon Railroad Tower



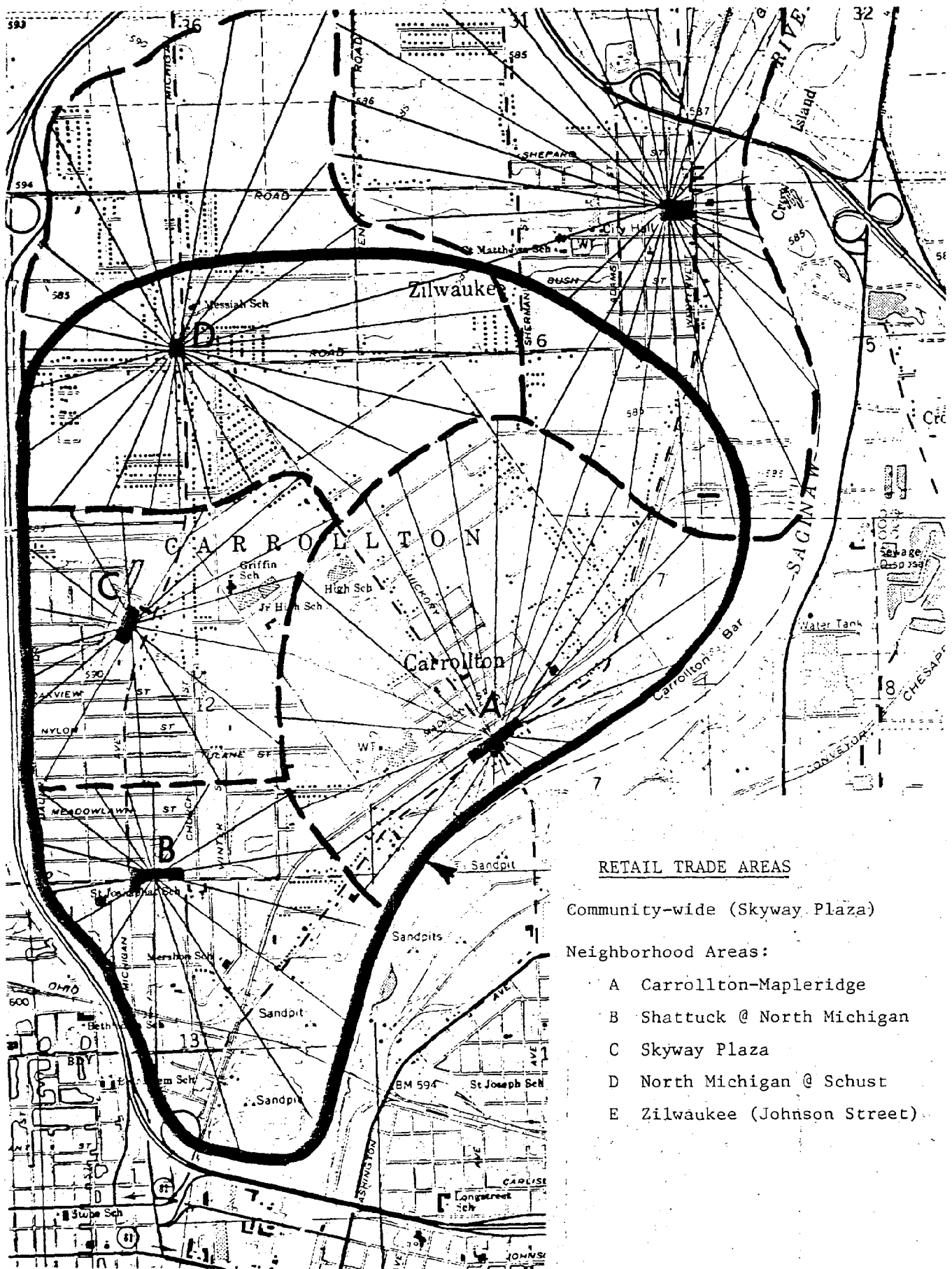
Former Mershon Saw Company
HISTORICAL/ARCHITECTURAL LANDMARKS

E. Neighborhood-Recreation Business Markets

The Carrollton Road and Mapleridge Road intersection was once the dominant consumer business area of Carrollton. Although since eclipsed by the Skyway Plaza on North Michigan Avenue, it still remains the principal neighborhood trading area for some of the residential areas that developed early in Carrollton's history. In addition to serving nearby residential areas, these businesses also serve some of the employees in nearby service and industrial operations.

The businesses in the Carrollton-Mapleridge Road areas can generally be categorized as a consumer convenience and include small-scale, independent business. The trade area for this neighborhood center was defined by determining the location of other nearby neighborhood centers, defining natural, manmade and political boundaries that impact these centers. The approximate primary market area for the Carrollton-Mapleridge trade area is shown on the following map. A consumer business inventory follows that map.

The business inventory is a summary of the trade area characteristics for the Carrollton-Mapleridge neighborhood business district. Generally the area can be characterized as having a higher percentage of minorities, lower housing values and lower income levels than the Township as a whole or the County. The result is that trade must focus on the more basic food, shelter and clothing needs.



RETAIL TRADE AREAS

Community-wide (Skyway Plaza)

Neighborhood Areas:

- A Carrollton-Mapleridge
- B Shattuck @ North Michigan
- C Skyway Plaza
- D North Michigan @ Schust
- E Zilwaukee (Johnson Street)

MAPLERIDGE-CARROLLTON ROAD TRADE AREA

CONSUMER RETAIL AND BUSINESS INVENTORY

Carrollton Coastal Planning Project

<u>Store Name/Classification</u>	<u>Estimated # sq. ft.</u>
Vacant For Sale	400
Kawasaki Cycle	1,000
Dominic's Plantation (Bar)	1,200
Red's Furniture Stripping	800
Convenience Market	2,000
Gas Station	600
Carrollton Bar	3,000
Maxa's Galley Restaurant	2,000
For Rent	800
Painters Local 1267	400
Barber Shop	400
Cook's Auto Body	600
Carrollton Hardware	2,400
Williamson Insurance Agency	600
Nickodemus Marathan Gas	600
Ware's Bike Shop	1,200
U. S. Post Office (Just outside of trade area)	800

CARROLLTON TOWNSHIP COASTAL MANAGEMENT PLANNING PROJECT

SUMMARY OF TRADE AREA CHARACTERISTICS

	<u>Carrollton- Mapleridge Area</u>	<u>Carrollton Township</u>	<u>Saginaw County</u>
Population	1,269	7,482	228,059
Blacks	24%	7%	16%
Spanish	17%	7%	5%
Housing Units	407	2,506	79,437
Owner	305	1,907	56,446
Renter	70	480	19,670
Owner Value	\$21,200	\$33,600	\$40,600
Household Income	\$13,038*	\$20,665	\$19,726

Total Disposable Income Carrollton-Mapleridge Market Area

Household Income	\$13,038
<u>Occupied Units</u>	<u>375</u>
	\$4,889,250

*Carrollton-Mapleridge income computed and based on an assumed relationship between owner value and household income.

There is no special commercial recreation business in the area. However, the Carrollton Hardware does include sales of fishing licenses and tackle among its inventory. Live bait, generally crawlers is also seasonably available at some stores or Carrollton Road homes.

An additional chart analyzes the trade area for its theoretical market potential. An examination of the chart demonstrates a marginal to modest potential. Perhaps the most promising alternative might be for an additional convenience store -most likely a locally-owned rather than a franchised operation.

At this time there is no reason to anticipate any expansion of the supplementary recreation business. Such recreation business would have increased potential with a boat launch in the area. That might contribute to marine fuel sales at the gas station and expanded bait/tackle sales. However, the likelihood is that the business activity increases would most likely be handled as supplementary to existing businesses rather than generate additional businesses.

MAPLERIDGE-CARROLLTON TRADE AREA
CONSUMER RETAIL AND SERVICE BUSINESS POTENTIAL

	Estimated % of Disposable Income	Market Potential	Potential Stores	Existing # Stores	New Store Potential
Food at Home	16.0%	\$ 782,280	2 convenience markets	1	1
Food Away	4.1%	200,459	1 + restaurant	1	0
Men's/Boys Clothing	2.0%	97,785	less than 1	0	0
Women's/Girls Clothing	3.0%	146,676	less than 1	0	0
Pharmaceuticals	4.5%	220,016	less than, to 1 small drug store	0	1 ?
Hardware	1.5%	73,339	less than 1	1	0
Barber	-	25,000	just under 1 shop	1	0
Beauty	-	50,000	1 + shops	0	1



PART: II COMMUNITY PARTICIPATION

PART II: COMMUNITY PARTICIPATION

An important part of this study is to maximize the participation of the community in the process of planning for future improvements. This includes the general public, the area residents, corridor businesses and related public agencies. But in order to increase the potential for implementation of the recommendations, particular efforts were made to meet with a number of the key property owners. The participation process included letters, survey forms that solicited participation from the various related public and quasi-public agencies: letters to property owners including the survey form; and a newspaper advertisement for a public hearing. The related agencies and property owners also received a notice to the public hearing in the mail. The results of the participation from each of these methods is summarized on the following pages.



A. Coordination with Related Agencies

Twelve agencies were specifically contacted regarding the program. These included four county government agencies, the planning region, two adjacent cities, two state agencies two federal agencies and two quasi-public organizations. The specific agencies and the transmittal letter are included in the appendix. Key findings and statements from these contacts are:

- Several noted that Carrollton Road is an economically important "back yard" of the urban area that is not attractive, is often dusty and noisy, and not appropriate for residential or cultural purposes. The area is nonetheless an economically essential and a valuable part of the community. These respondents accordingly raised skepticism regarding the need for or ability to undertake beautification.
- There was some concurrence with the potential for passive recreation and nature conservation for the Carrollton Bar and Seaway Drive area. It was noted that the area is a large, environmentally sensitive location in the midst of an urban community. A possible boat launch was also noted as being well-located relative to the other boat launches on the Saginaw River: it is about half-way between the Wickes Park and Veterans Memorial Park launches and is on the opposite side of the river.
- The importance of preserving the potential for additional marine terminal development was underscored as well. Carrollton Township represents the greatest location of potential multi-ownership, additional marine terminals in urban Saginaw.
- None of the respondents indicated major potential for commercial recreation based on Saginaw River access.

Not surprisingly, the answers tended to reflect the particular role of the agency that responded. Parks agencies responded positively in that regard while an economic agency viewed the area from its perspective. There is some contradiction in the results, but they should be reconcilable by careful planning.

B. Property Owner Contacts

All Carrollton Road property owners in the study area were contacted by mail with a survey form. In addition, the planning consultant made visits with some of these property owners. All of the major businesses were contacted by phone if possible.

The survey was returned by ten of the property owners. Eight respondents were businessmen and two were residents. The form and results are included in the appendix. The most significant conclusions from responses can be summarized as:

- All responding property owners felt their use of the property is appropriate and successful and is likely to continue for the foreseeable future.

- The eight businesses employ 108 full-time and 23 part-time employees.

- Six proposed continuing the current use of the property without change while two want to expand on their existing property. Only one owner (residential) proposed discontinuing the current use.

- Four wanted no future assistance from the Township. Better storm drainage, beautification of the road and road improvements were favored by a minority. Four wanted to see an industrial-commercial development district for tax relief. Minor interest was expressed in eliminating eye sores and improving police and fire protection.

- Eight respondents supported simple, direct, easily maintained aesthetic and visual improvements for Carrollton. One felt it inappropriate and one did not respond.

- Seven cited public recreational opportunities and public access to the the Saginaw River as being important. Two respondents specifically mentioned the road commission property as being a potential site. Two were opposed to recreation or public access in the area and one did not respond to the question.

C. Community Participation Seminar

Because of conflicts with other schedules the public seminar was held later in the process. The meeting was held on August 22, 1983. The seminar was in the form of a public hearing that included a presentation by the planning consultant. He presented the purpose of the study; the current conditions and the draft general development plan. The Township Planning Commission attended the meeting along with approximately 35 citizens. The principal comments and responses at the public hearing were:

-Flood plain problems are very major at the properties cited as appropriate for recreation according to one property owner.

The consultant agreed that a flooding condition exists and said that the recreation would be passive in nature such as trails, picnic areas, nature study and other activities and facilities not seriously impacted by flooding.

-A resident inquired as to the size of the Carrollton Bar in acres.

The consultant said measurement depends on whether associated wetlands are included and the time of year, but that the 20 acres range is appropriate.

-One citizen commented that it is possible to plan, but how could the plans be implemented?

It was explained that the Michigan Land Trust Fund is being solicited to acquire the Carrollton Bar and wetlands. Other state and federal grants are still available as are private trusts and service groups in addition to Township resources, which are limited.

-Carrollton Road is so unattractive that parks may also be unattractive to potential users according to another citizen.

The beautification plans proposed can be simple, relatively inexpensive and effective according to the consultant. With beautification the access to the parks can be more attractive. Several implementation techniques were explained.

A Department of Natural Resources official also elaborated on the techniques, permits required and implementation of such plans. He observed that the proposals suggested are consistent with successful programs elsewhere. A more detailed "Summary of Public Hearing Comments" is included in the Appendix. Also included in the Appendix are some of the comments from interviewed agencies and property owners.

Most of the recreation access focused on the wetlands off Seaway Drive and Carrollton Bar as well as the road commission property at Shattuck Road. The residents supported that and also supported the idea of public access to the river for boaters.

The total participation offered through agency coordination, property owner involvement and the community participation seminar were then digested and reviewed by the planning commission and the consultant. As a result, a synthesis was made for this policy input and the development goals were defined.

D. Synthesis of Policy Input and Development Goals

In examining the overall character of community participation several key policy areas emerged as important. One is the policy issue of additional marine terminal and riverport development. The input suggests that existing marine terminal is expected to continue, providing user charges do not come about and providing dredging continues. Major expansion, however, is not contemplated. This is consistent with the conclusions of other studies as well. The input does support maintenance of existing marine terminal and riverport facilities.

A second policy issue can be described as recreation access to the river. Both the public hearing and several of the survey responses indicated strong support for the concept. The greatest attention at the public hearing was on the Seaway Drive/Carrollton Bar area while the surveys mentioned the Road Commission property at the terminus of Shattuck Road. It was a consensus that passive recreation including trails, nature areas and picnic areas were most appropriate. There was also general support for a boat launch in the riverfront area.

Still another major policy issue was beautification of Carrollton Road. Support for such improvements was very strong at the public hearing and through the survey. While it was strongly endorsed, some residents expressed doubt that implementation could result.

The potential issue of commercial development for retail and service or for marine commercial was not a matter of key concern with the public meeting or

survey respondents. This reinforces the modest trade market potential identified earlier in this study.

Considering these issues, past goals identified is the Township's comprehensive planning program and the directions suggested during input. A goal with a subordinate set of objectives and strategies for dealing with the study area are defined as follows:

- GOAL - Provide a balanced use of the riverfront that permits marine terminal and related industrial and commercial uses in conjunction with well-designed recreation access facilities for fishing and boating.

- OBJECTIVES -
 - Maximize the potential uses of the river for both economic and recreation purposes.
 - Encourage new developments that remove conflicting uses and provide buffering landscape themes to minimize visual impact.
 - Improve the appearance of the Carrollton Road corridor.

- STRATEGIES -
 - Make regulatory and economic incentives available to business development in the coastal area.
 - Provide incentives for additional marine terminal uses
 - Support a riverfront park incorporating boat access, picnic area, fishing pier and similar appropriate uses.
 - Revise ordinances to require landscaping and site plans for buffers and beautification.



PART III: GENERAL DEVELOPMENT PLAN

PART III: COASTAL AREA GENERAL DEVELOPMENT PLAN

With an understanding of current conditions and a general policy direction outlined by the participation process, it is now possible to develop a plan for Carrollton's coastal area. The first aspect of developing the plan is an examination of vacant parcels. This is foremost because the vacant parcels are most subject to rapid change.

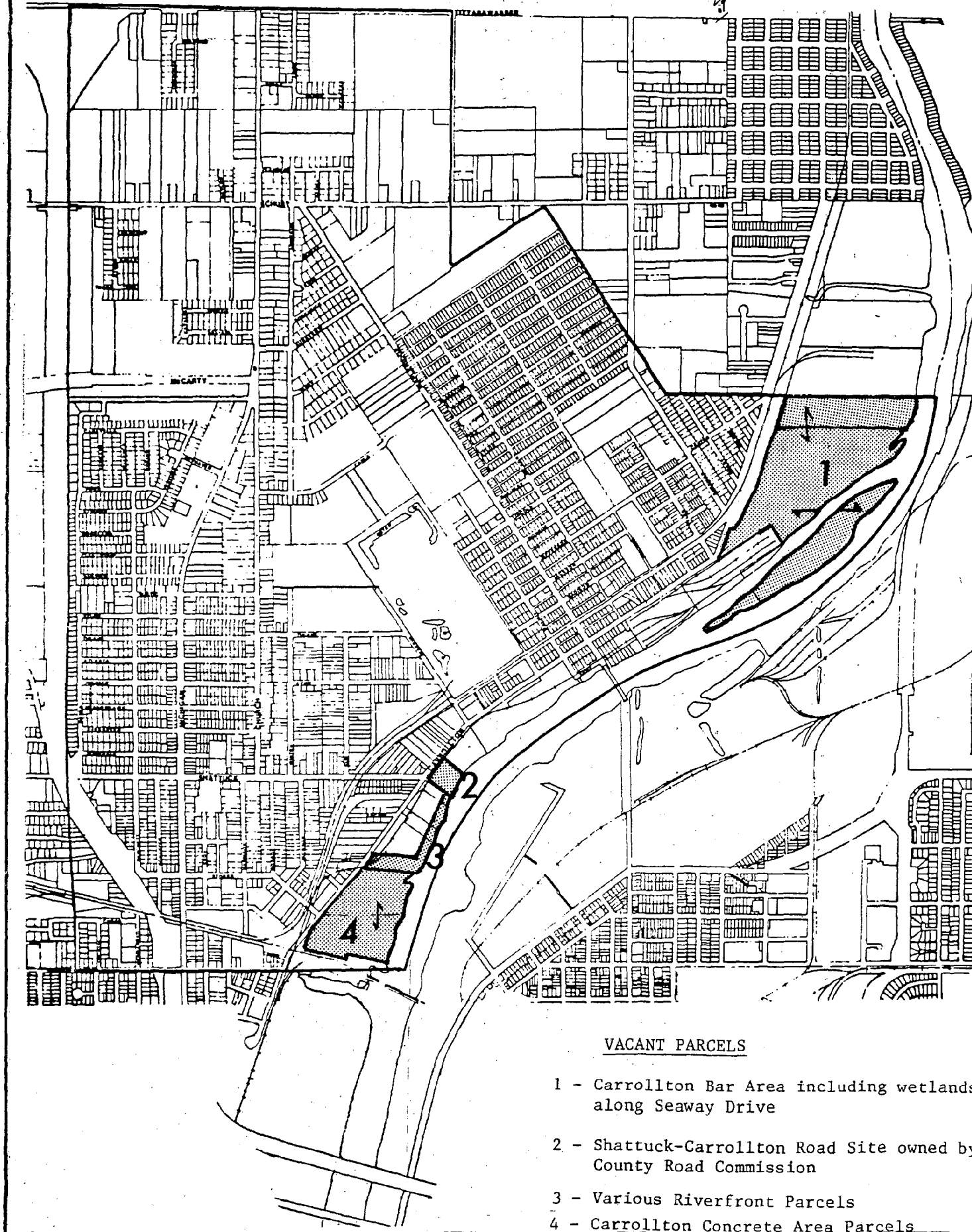
A. Vacant Parcel Options

There are a number of significant vacant parcels or potentially underutilized parcels previously identified in the project area. These are:

1. Several descriptions that make up an area described as Carrollton Bar and Nearby Wetlands Area. This area has essentially no existing manmade structures.
2. The Shattuck-Carrollton Road riverfront parcel located on the river also has no significant manmade features on it.
3. Immediate river frontage for the MacArthur Roofing and Schaefer Chemical parcels are not utilized even though the road frontage is developed and currently used.
4. Two separate parcels known as the Carrollton Concrete property are not vacant, but are used for aggregate storage, an asphalt plant core sand storage, and concrete mixing. However, the property is underutilized, easily cleared and potentially available should these activities cease.

Each of these parcels is shown on the following map and is further analyzed on a subsequent chart that suggests the primary optional uses. The optional uses are primarily the potential for recreation or marine terminal. The Carrollton Concrete area parcels could be use in a number of different ways

CARROLLTON TWP.



VACANT PARCELS

- 1 - Carrollton Bar Area including wetlands along Seaway Drive
- 2 - Shattuck-Carrollton Road Site owned by County Road Commission
- 3 - Various Riverfront Parcels
- 4 - Carrollton Concrete Area Parcels

OPTIONAL USES FOR VACANT PARCELS IN THE COASTAL AREA

PARCEL	ACRES	RIVER FRONTAGE	CURRENT CONDITIONS/USE	LIMITATIONS	OPPORTUNITIES (In addition to current uses)	POTENTIAL OPTIONAL USES
1. Carrollton Bar and Nearby Wetlands Area	80	1,500	Bar or Island is wooded, about 50% of Seaway Drive property is wetlands, 5% wooded and 45% field.	Wetlands should not be disrupted; access to bar would require 100' + bridge; shipping access to west channel not available; fairly strong noise at site; from foundry	Site has interesting cattail marsh vegetation; west channel could be useful for small boat access; interesting natural area in midst of urban development;	<ul style="list-style-type: none"> - Passive recreation and environmental area with trails - Interpretive center, picnic areas, with or without - Boat launch - West channel marina
2. Shattuck - Carrollton	5	500'	Semi-maintained grass, several free standing trees on site	Future extension and bridge on Shattuck Road to Fifth-Sixth W. Washington Roads in Saginaw would require this parcel; subject to considerable flooding.	Attractive, pastoral parcel for passive park; might support small site for boat launching.	<ul style="list-style-type: none"> - Small riverfront park for picnics - Boat launch - Part of "Corridor Park" - Bridge
3. MacArthur - Schaefer River Frontage	7	1,500	Unused or very informal parking. Not used for shipping terminal.	Carrollton Road frontage would remain with operating businesses, precluding road access; not large enough for parking or structures.	Could be useful as a riverfront corridor for trails, picnics and viewing.	<ul style="list-style-type: none"> - Port of "Corridor Park" - Future marina terminal
4. Carrollton Concrete property	40	1,500	Land used for aggregate terminal and storage and concrete mixing plant.	Not available if shipping channel remains open and concrete operations continue; some wet areas on site.	Large parcel with multiple use potential relationship with proposed City of Saginaw riverfront recreation immediately to south;	<ul style="list-style-type: none"> - Future marina terminal - Private amusement extension of Saginaw sawmill project - Public park and part of "Corridor Park"

Those parcels that are appropriate for possible recreational uses could be public or even private in some cases. Private commercial recreation would focus on a pay boat launch-boat service-retail facility or even a marina. It is also possible that a public facility could have a commercial concession.

Several uses are ruled out in some areas. The northern half of the study area includes some major industrial-terminal uses, has vacant land with sensitive wetlands, and is impacted by foundry noise. For these reasons, the area is not considered for any residential or institutional purposes. The wetlands area is also not appropriate for marine terminal or industrial development. The southern half of the area also has some intensive terminal, processing and industrial operations that make residential or institutional improvements unlikely candidates for utilization. Consequently, marine terminal, commercial recreation and public parks are the dominant potential uses for these vacant parcels.

To determine what are the priorities for utilization of each parcel, they were examined in terms of the appropriateness of each of the cited options by examining the physical site conditions; community perspective; property owner perceptions; and the consultants appraisal of potential market needs. These are then reviewed and a consensus gleaned. The potential market needs as defined by the consultant are essentially reflected in some of the subsequent elements in this phase.

The following chart summarizes the development of the best consensus options.

PRIMARY OPTIONAL USES OF VACANT PARCELS IN COASTAL AREA

Referenced Parcel(s)	Physical Site & Environmental Characteristics	Community Needs/ Goals Perspective	Property Owner Perceptions	Potential Market Demand	Most Appropriate Use Recommended
Site # 1. Carrollton Bar-Seaway Drive Area	Low intensity public park-nature area; or controlled marina level.	Long sought by local groups as a potential park or recreation site.	Use may be appropriate as no access to shipping channel.	Defined need for passive recreation in Township. Marina demand is uncertain.	Low intensity, passive recreation
Site # 2. Shattuck-Carrollton Roads Site	Public aesthetic and passive park potential. Flood condition major.	Needed for future bridge/approach right-of-way.	Maintain for future bridge and approach use.	Need for passive parks and recreation uses.	Bridge right-of-way is dominant need,
Site # 3. River's Edge Part of various Parcels.	Area floods, no docks in place, no structure on land.	Community values are for corridor park, or for additional marine or industrial tax and employment.	Owners not contacted, but must see benefit to accept any change in status. May resist any change to quasi-public use.	No strong, dominant need in market.	Would require careful, sensitive efforts to develop for public use.
Site # 4. Carrollton Concrete Area Parcels	Existing uses for marine terminal, stone dock, asphalt & cement plants current use. Some annual flooding.	No strong community values apparent.	Prefers private sector use but recognizes limits for marine terminal; alterns. are for private marina or private recreation.	Marine terminal demand uncertain, industrial-distr. may be good, is receptive to pvte. recreation.	Concentrate efforts on marine terminal, industrial, private recreation/amusement use, or public park in that order.

See map for shape and location of sites and parcels. Most appropriate use recommended by consultant and does not necessarily reflect support of individual property owners that own the parcels involved.

It should also be noted that some important changes in direction are possible for several of the parcels because of nearby developments. For example, if it should be determined that a Shattuck Road bridge were not to be constructed for several decades or possibly not at all, that parcel is very attractive for recreation. If no other Carrollton Road access is afforded to the river frontage of the MacArthur-Schaefer Chemical properties, it is not practical to consider a beautified recreational use for them.

Perhaps, the major parcels with a dramatic shift in potential use are the Carrollton Concrete area properties. If the federal government were to cease financing all costs for dredging the Saginaw River, then their potential as marine terminal is greatly diminished. Furthermore, if a unique public quasi-public recreational development now proposed immediately south of Carrollton Township in the City of Saginaw were to be successfully realized, then the site has excellent potential as a complementary commercial recreation-amusement facility. This is discussed further and conceptualized in the following section.

B. Further Commercial Development

During the previous inventory and initial analysis, some general directions were apparent for commercial development. Perhaps foremost of these were:

- Convenience Store
- Drug Store/Variety Store
- Beauty Store

It should be noted, however, that these potential developments have several characteristics that should be considered. One is that these are theoretical considerations based on the Carrollton-Mapleridge area being as

convenient and attractive as other centers. In fact, parking and aesthetics may be somewhat of a negative influence.

Secondly, it should be noted that most of the potential for these developments is marginal according to hypothetical minimums for such business. This means that there is little room for management error for an operator. It also means that the market is probably inadequate for franchises, developers and other outside interests that require a significant profit above and beyond salaries. The market may be profitable, though, for an individual entrepreneur who seeks primarily a satisfactory personal income.

Thirdly, the market does not demonstrate encouraging long-term prospects for growth. The area has had a net decline in population since 1970 and even housing units in the immediate area have declined. Probably some new stability has been brought to the area with recent block grant programs, but actual growth has not emerged. Thus it is appropriate to also look to attracting auto traffic from both Mapleridge and Carrollton Roads as part of any strategy. Even this, though, is endangered by the likely eventual closing and removal of the Sixth-Street Bridge.

Finally, Carrollton Township has the Skyway Plaza community shopping center that is only one to two miles from the neighborhood residences and is in a position to offer retail services. That center, moreover, has not been particularly successful despite a good location, good access and plenty of parking. Thus it tends to detract from the possibility of building an exceptionally strong neighborhood business center in the coastal area.

Based on these considerations it appears that the best efforts would be to concentrate on development for these enterprises:

- An attractive convenience store that is stocked in the more basic day-to-day needs that are consumed by low-moderate income families.
- Strengthen the existing key businesses such as Maxa's Galley and improve access and parking for existing business.
- Modernize the street intersection to permit better traffic flow and image in the area.

To maximize the potential for these developments it is important to provide ready access to either or both Carrollton and Mapleridge Roads. It is also necessary to provide adequate parking and a clean appearance.

Commercial recreation was explored as a possible growth area. Specifically, consideration was given to a commercial marina, bait and tackle shop(s), boat and accessory sales and service and related materials. The marina exploration was not a detailed market analysis. It consisted principally of investigating use trends at existing marinas. The conclusion is that close access to the Saginaw Bay is very important to most boaters, and most especially sailboat enthusiasts. While an exceptional marina operation might be successful, it would require carefully targeted marketing to power boaters, river fisherman and skiers and other select groups. Even so, many in this group can be satisfied with a high-quality boat ramp.

In the discussions with marina operations, none of the responding marinas indicated that they were at capacity and none reported a waiting list. Most of these marinas were in the Bay City area. In Saginaw, the only private or public marina is Riverfront Marina on Lee Street off Niagara. It has a potential capacity of 80 boats with docks in for 60 boats. The docks are used to approximately 90% capacity. It is an attractive basin off the river and would appear to be well operated. Boaters from Riverfront Marina are about one to two hours from the Saginaw Bay and just a few minutes from the broad, though relatively shallow Shiawassee National Wildlife Refuge flats. Many of the boaters, though, use the Saginaw River itself for boating rather than the Bay or flats.

Perhaps the depressed local economy affects the ability to fill these slips, as some marinas have had waiting lists in the past, though not the Saginaw marina. At any rate, current utilization would indicate that there is not now sufficient market demand for additional marina slots. Furthermore, Riverfront Marina could tolerate a 57% increase in utilization before additional Saginaw slips are marketable. Accordingly, an additional marina is not recommended for immediate implementation.

On a long-term basis, though, a marina could be appropriate. The Saginaw River is getting cleaner and the City of Saginaw is beautifying much of its river frontage. As the river continues to be improved and more attractions are focused on the river, it is quite conceivable that powerboaters can be attracted for an additional marina.

Discussions with state DNR officials indicate that one possible location for

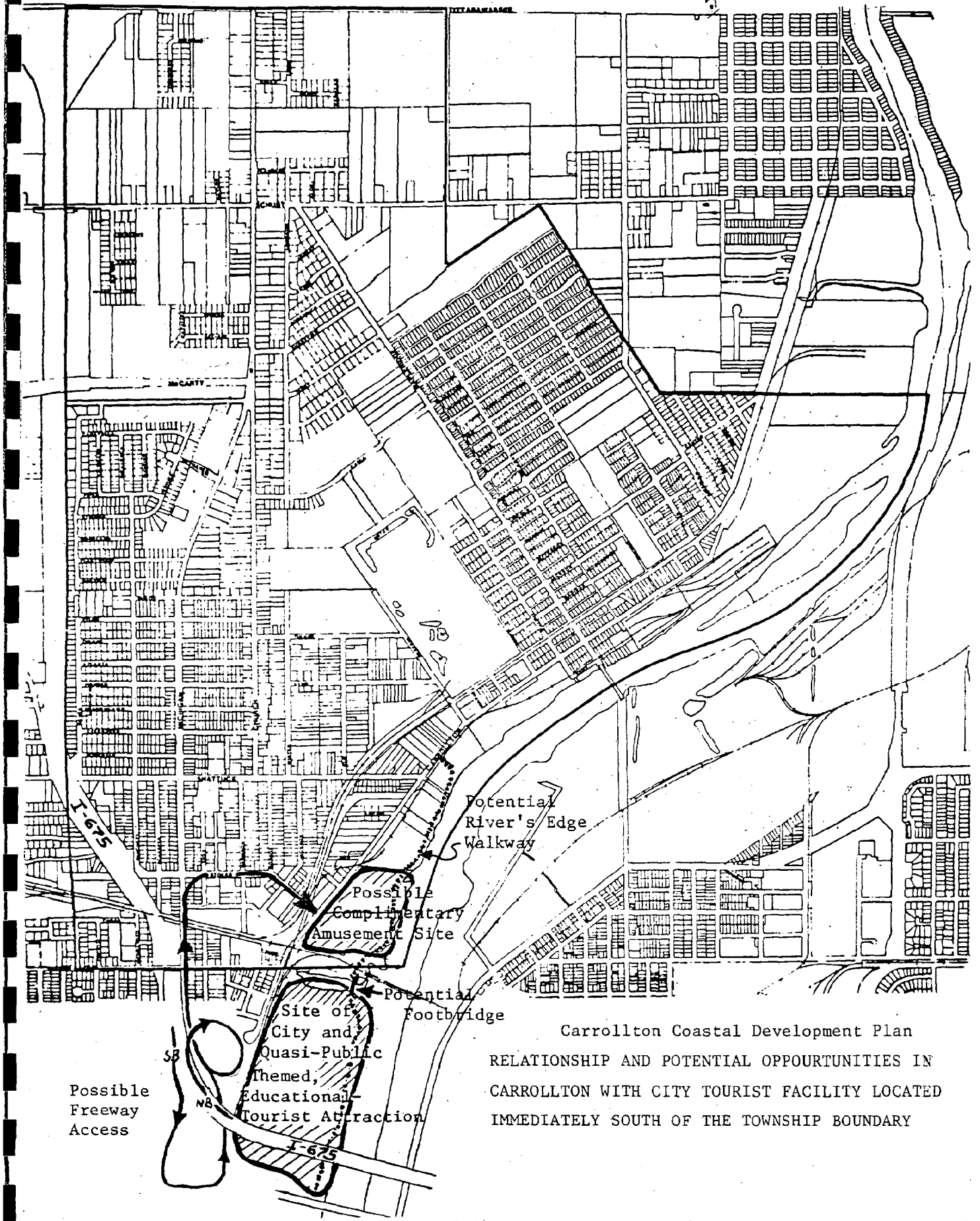
a marina might be the west channel of the Saginaw River between the Carrollton Bar and the shore. This location might be acceptable for marina development into the river instead of the otherwise preferred, but more expensive, alternative of constructing a basin off the river. This would enhance the economic feasibility for an eventual marina.

Without a marina base, much of the related commercial activities for recreation are without a ready market. The existing modest fishing tackle sales at the Carrollton Hardware may be adequate. The addition of a boat launch facility, though, could increase the potential for such secondary sales related to existing business.

One potential major change for the riverfront could be at the southernmost edge of the riverfront at the City of Saginaw boundary. At that location the City intends to acquire more than forty acres of riverfront property. In cooperation with an existing quasi-public agency, this site would be developed into an educational and visitor-oriented facility that could become a significant local tourist attraction. If this happened the immediately bordering tracts in Carrollton could be linked to that attraction with a bridge across the inlet. A compatible recreation development including amusement activities could then be developed. This could also result in a potential long riverfront recreation corridor for walking and hiking from the Johnson Street Bridge north to Shattuck Road.

The precise scale and character of any such commercial recreation-amusement park would require a more precise understanding of the eventual City project and should be reevaluated when that is possible.

CARROLLTON TWP.



Carrollton Coastal Development Plan
 RELATIONSHIP AND POTENTIAL OPPORTUNITIES IN
 CARROLLTON WITH CITY TOURIST FACILITY LOCATED
 IMMEDIATELY SOUTH OF THE TOWNSHIP BOUNDARY

Conclusions and Recommendations

for further

Commercial Development

It is recommended that commercial development in Carrollton Township be strengthened by environmental changes, by encouraging, some new business and by emphasizing businesses that are not consumer-sensitive, and possibly introducing a marketing theme for the area.

Proposed environmental changes are as follows:

1. Beautify the Carrollton Road frontage per the preliminary design concepts in the following chapter.
2. Improve available parking facilities in the area.
3. General program of building clean-up including painting and fix-up, new signs and landscaping.

Encouraging new business could include:

1. An additional convenience market relatively close to the Carrollton-Mapleridge intersection near Shattuck.
2. Encourage service business that are not consumer sensitive including beauty shops, professional offices or specialty retail.

It may be appropriate to introduce a simple and inexpensive marketing theme. A concept such as "Waterfront Corners" could be reenforced by some symbolic signage and land or streetscaping in the area.

The principal intent, though, is not so much to bring in new business: there really is no significant market demand for them. Rather it is to maintain and strengthen the existing businesses. Significant growth would require additional residential development in the trade area, and such growth has not occurred for many years.

C. Context for Industrial-Marine Terminal Growth

In order to examine the potential for additional marine terminal and industrial development along the Carrollton coastal zone, it was not necessary to initiate any new basic studies. A number of very useful studies have been completed for the Saginaw River seaport. The most recent and comprehensive study was the Saginaw River Port Development Study completed by consultants under a coastal zone management study, sponsored by the State of Michigan. This study focused on marine terminal development, water-dependent industry and recreation.

This study indicated that -based on some uncertain assumptions -there could be considerable marine terminal growth, primarily for grain, pellets, coal and fertilizers. Clearly agriculture is the dominant growth sector. Sand, stone and aggregates would have only modest growth and general cargo is unlikely. However, the study noted the problems of keeping the entire river channel open to Saginaw. They noted costs of dredging versus, benefits, possible future user fees, and environmentally sound disposal of dredge spoils. Accordingly, they recommended that new marine terminals, namely a grain elevator and a bulk terminal, be constructed in Bay City. Efforts for terminals such as Carrollton would then attempt to preserve and expand their existing facilities.

The Saginaw Metropolitan Area Transportation Study is entitled Long-Range Transportation Plan. It synthesized the state port study and indicated

problems for future growth. Study Director Jon B. Mersman said that the best potential marine terminal or industrial site in Carrollton was possible use of the Carrollton Concrete area properties.

The East Central Michigan Planning and Development Region in Saginaw had a number of publications that discuss the Saginaw River port, but does not detail its character or potential. No specific conclusions or recommendations were made.

A number of older studies were investigated for current relevance. These include a study of Economic Benefits of Extension of the Navigation Season to Twelve Months for the Port of Bay County for the 1976-80 Period, 1975, Saginaw Valley State College Department of Economics and Michigan's Commerce Domestic and International, 1966, Michigan Department of Commerce. In general, it would appear that these studies were based on conditions and assumptions that have not been maintained or realized in actual practice. Port planning in the past would seem to have started from an optimistic perspective. It was also unable to foresee impacts of shipping technology and equipment or of rail deregulation.

The most comprehensive and most current study of the Saginaw River is certainly the Saginaw River Port Development Study. This does serve as the principal documentation for Carrollton's marine terminal potential. But in addition to this literature review, specific coordination was made with a number of knowledgeable authorities.

Larry Karnes, Marine Transportation Planner for the Michigan Department of

TABLE II-1

SAGINAW RIVER CHANNEL DEPTHS						
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS--SURVEYS TO MAY, 1978						
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE HALF OF QUARTER CHANNEL	MIDDLE	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES) DEPTH (FEET)
ENTRANCE CHANNEL	14.5	17.5	19.5	6-77;5-78	350	13.70 27
THENCE TO BUOY 34	15.0	17.0	14.0	6-77;4-78	200	6.47 26
THENCE TO ESSERVILLE TURNING BASIN	21.0	18.1	14.1	5-78;4-78	200	2.27 25
ESSERVILLE TURNING BASIN	23.0	23.1	19.4	1-5-78	650	8.37 25
THENCE TO 6TH RR BRIDGE	18.9	18.7	21.0	9-77;4-5-78	200	2.05 25
THENCE TO AIRPORT TURNING BASIN	18.4	19.1	18.5	7-71;5-75	200	3.80 22
THENCE TO BUOY 54	11.7	20.0	16.0	7-78;12-77	200	3.28 22
THENCE TO INTERSTATE HWY 75 BRIDGE	18.0	21.2	16.0	7,8-78;4-78	200	2.75 22
THENCE TO 6TH ST TURNING BASIN	12.7	14.0	16.0	6-75;1,4-78	200	3.10 22
6TH ST TURNING BASIN	12.0	14.1	11.7	10-77	650	0.20 22
THENCE TO CAD RR BRIDGE	18.0	18.7	12.2	18-77	200	0.17 22
THENCE TO CARRILL ST.	15.0	15.0	13.0	18-77	200	0.30 18
NOTE--CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION						

TABLE IV-1
HISTORICAL TREND,
TOTAL CARGO MOVEMENTS, SAGINAW PORTS,
(in Short Tons)

Year	Tons	Year	Tons
1978	3,173,573	1961	5,683,261
1977	3,656,238	1960	5,575,660
1976	3,072,473	1959	5,291,346
1975	2,705,330	1958	4,309,886
1974	4,180,075	1957	4,810,845
1973	4,095,978	1956	4,607,686
1972	4,386,273	1955	4,510,663
1971	4,847,133	1954	3,609,397
1970	4,616,434	1953	3,953,397
1969	5,098,710	1952	3,924,084
1968	5,228,842	1951	3,790,914
1967	6,562,483	1950	4,213,650
1966	7,243,288	1949	3,248,610
1965	7,003,601	1948	3,560,273
1964	5,874,886	1947	3,072,321
1963	5,317,827	1946	2,515,181
1962	5,041,897	1945	2,317,679
		1944	2,227,974

SOURCE: U.S. Army Corps of Engineers
Waterborne Commerce of the
United States, annual.

Transportation basically reenforced the conclusions of the principal study. He also added that rail deregulation, the small and aging fleet of shallow draft grain vessels (6 Canadian ships) that use the Saginaw, and potential user fees are very important constraints for future marine terminal development on the Saginaw. He further advised that a recently completed survey of terminal operators indicated that there is major excess capacity in existing terminals. He did note, though, that the Surath-Luntz scrap metal facility in Carrollton may represent some of the best potential for expansion.

Jon B. Mersman, Saginaw County Planning Director, generally supported the recent port study. He did specifically comment that the long-proposed Shattuck-Fifth/Sixth Bridge could be built at Weiss St. to avoid a bascule span at Shattuck. He also specifically identified the Carrollton Concrete site as the single most attractive marine terminal or industrial site remaining in Carrollton. County Economic Development Director Jerry Breen also felt that Carrollton was relatively attractive for some future industrial development.

It should also be noted that the most attractive potential marine terminal site now available in Saginaw County is the former Consumer Power Company coal dock located about 1 1/2 miles north of Carrollton in the City of Zilwaukee. This site already has a high quality dock at the site.

The potential for additional industrial development that may be or may not be water dependent is also somewhat clouded for Carrollton. For one thing, Carrollton Township is physically small and is already rather heavily

residential. This means that there is not much open land available for new industrial development. The community's comprehensive development plan further confines industrial development to the Saginaw River-Chessie Railroad-Carrollton Road corridor. The land west of Carrollton Road will be essentially limited to small industries including small wholesalers and suppliers, machine tool businesses or specialty products. There are no major vacant parcels appropriate for industrial development along the riverfront. Carrollton will be attractive for principally small industries and warehouses.

The survey of existing marine terminal, industrial operations and vacant land owners also indicated no major impetus for development. None identified major short-term or long-term plans that require changes in the existing development pattern.

In addition, long-term consequences of the recent local economic depression have left a large number of small and even large industrial structures and found in urban Saginaw. These include the Wickes plant on Washington, General Motors Parts Plant on Sixth and Washington and Steering Gear Plant 1 on Hamilton, a number of vacant but modern smaller structures in Buena Vista Township, Saginaw Township, Bridgeport Township and the City of Saginaw. It is probable that these available and functional facilities will be absorbed slowly by the market before new facilities will be sought.

Conclusions and Recommendations for Marine Industrial Development

A summary of key comments from literature review and agency coordination is included in the appendix. The information received warrants these conclusions:

- It is generally unlikely that additional major demand for marine terminal will result in Carrollton Township in the near future. However, should it be generated, the Carrollton Concrete site is most appropriate.
- Carrollton cannot expect to attract major new industries because of land availability limits. Accordingly it will have to market smaller industrial-distribution uses along the Carrollton Road corridor.
- The largest "vacant" parcel at the Carrollton Bar is not appropriate for industrial or marine terminal development because of the island and the major wetlands at that site.

Generally, then, the industrial-marine terminal development plans focus around maintenance and improvement of existing use patterns and in-filling small businesses where appropriate in the corridor. Dramatic changes are not warranted by either the market place or by the physical conditions of Carrollton Township's coastal corridor.

D. Impact of Commercial-Industrial-Marine Recommendations

The recommendations presented here do not call for any significant rapid changes in the area. The purpose is primarily a maintenance, formalization and improvement of existing conditions. As a consequence there is also no major impact based on these recommendations. This is based in part on avoiding potential conflicts in formulating the recommendations. For example, classic planning theory of the 1950's and 1960's would suggest an industrial or marine terminal for the Carrollton Bar/Seaway Drive area, but this was not done here because of the site's sensitivity. The rather minor social, economic and environmental consequences of the commercial and

industrial recommendations are summarized below. These impacts are examined in the context of five resource areas identified in the State of Michigan's coastal management plan: (1) recreation and culture, (2) economic potential, (3) natural hazards, (4) sensitive to alteration, and (5) areas of intensive use.

The social impacts of the commercial and industrial development proposals can be described as minor, but positive. The proposals will result in some transportation improvements and some possible storefront beautification. The growth and physical changes should help to stimulate community pride and self-respect. The possible greater selection of goods and services would also be an asset. Appropriate "Areas Fulfilling Recreational or Cultural Needs" are also noted and planned for preservation. These include passive recreation sites as well as the old rail station and the former band-saw factory, both of which are significant as historic sites.

The economic impacts will move in two directions. In one direction there are potential community costs for public improvements. In the other direction there is the potential for increased tax base associated with private investment and possible additional employment for area residents. Because the amount of prospective private investment is speculative, a cost-benefit relationship is not possible. There would not appear to be any significant new "Areas of Natural Economic Potential" in the Carrollton coastal zone, but rather only minor additional areas appropriate for such cases.

The environmental impacts, as noted earlier, are minimized by design. The entire area is within the 100 year floodplain and thus that "Area of Natural

Hazard to Development" could not be avoided. However, it is under the Federal Flood Insurance program so that relevant design standards are required. There is some temptation to extend potential industrial land uses all the way north to Zilwaukee along Seaway Drive and the river. However, there is a large valuable (from an ecological standpoint) cattail marsh on the property. Furthermore, it would require enormous amounts of fill and is not, therefore, a particularly viable area for such development. The wetlands and Carrollton Bar also constitute "Areas Sensitive to Alteration or Disturbance" under the state plan. Thus these areas are precluded from being adverse impacts and thus there is not negative impact from the commercial and industrial plan.

The Township's recently adopted comprehensive plan does call for eventual assimilation of existing residential homes along Carrollton Road into either commercial or industrial use. This is done in the interest of removing "Areas of Intensive or Conflicting Use". However, it is not a proactive plan and is rather intended for long-term removal of houses after the functional utility as residential property ceases. An estimated twenty-five homes fit in this category. Because it is in a legally adopted comprehensive plan and is the practical way to remove essentially conflicting land uses, those plans are part of this coastal management concept as well.

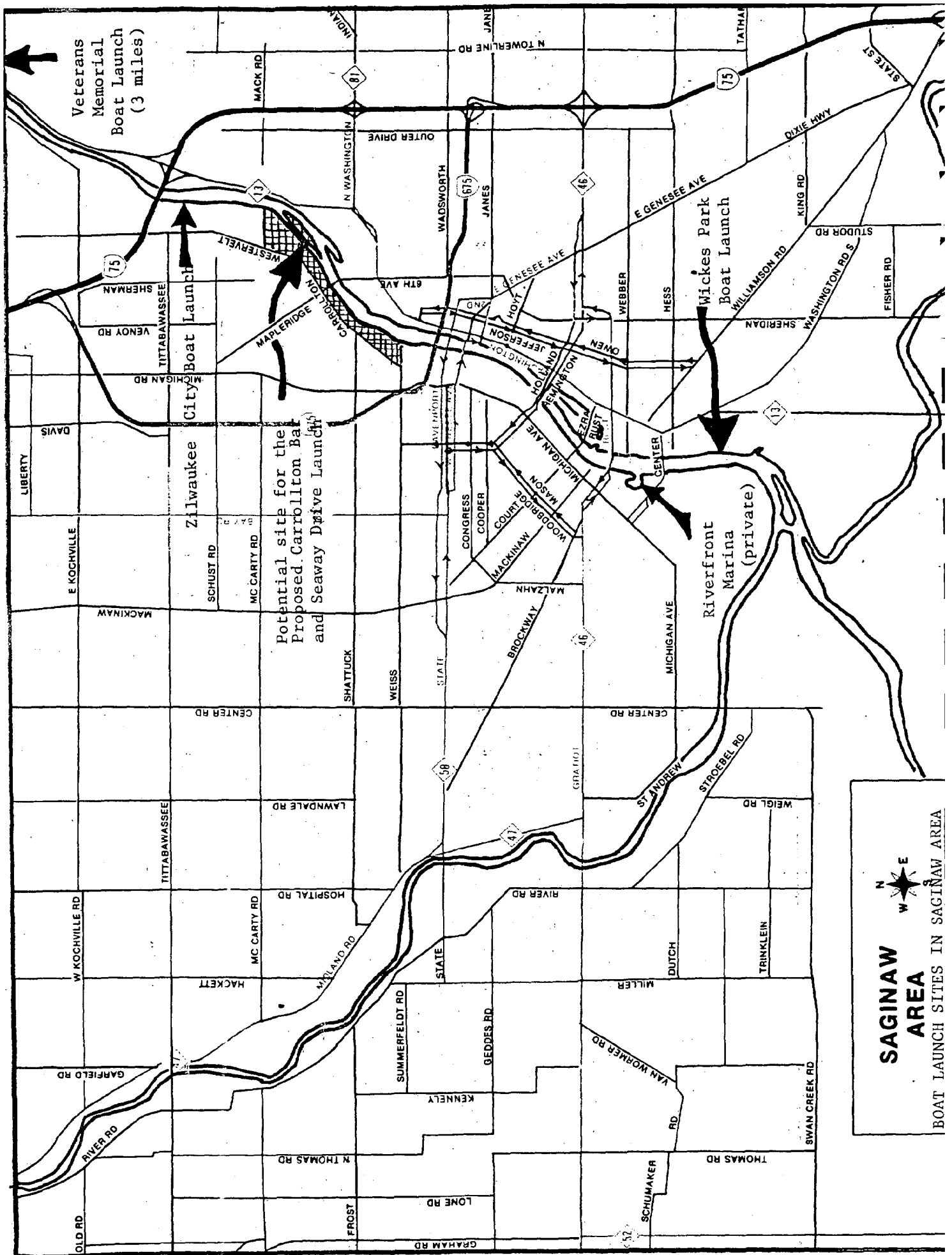
The net result is that there is no significant, and certainly no adverse, impacts from the commercial and industrial development plans offered above.

E. Desirable Public Access and Recreational Development

The public participation phase of this program supported the concept of public access and water-related recreation along the Saginaw River in Carrollton Township. The conditions of the coastal area and the optional use for some of the vacant parcels also demonstrated some very appropriate sites for such uses. Based on this previously documented information, desirable public access and recreation development is proposed.

First it might be noted what the context is for public access and recreation. Public access to the Saginaw River in Saginaw is usually not oriented toward the Saginaw Bay. It is for river recreational purposes including cruising, catch and release fishing and also a significant amount of water skiing. Public access along the upper reaches of the Saginaw River has limited availability. Only two major public access points are used. One is the Wickes Park Ramp, which is near the southern terminus of the Saginaw River at the confluence of the Tittabawassee, Shiawassee and Cass Rivers. This site is about five miles upriver from a Carrollton site on the east bank. This site is well developed with ample parking and amenities. Its utilization might best be described as light to moderate. A major reason for limited use might be a public perception that this particular location is in a relatively high crime area that has risks for leaving cars and trailers behind.

The other site is a new one located at Veterans Memorial Park just inside Bay County. This site opened in 1983 but its utilization has already been significant with all 10 trailer parking spaces filled at times. This site



SAGINAW AREA

BOAT LAUNCH SITES IN SAGINAW AREA

is about five miles north of a potential Carrollton site. It is a relatively attractive and functional facility.

One other public access site does exist very close to Carrollton. Zilwaukee's Riverfront Park has a single boat ramp into the river on the west bank within a mile or mile and a half of a prospective Carrollton site. Normally, this would eliminate any need for a Carrollton boat launch. However, there are some fundamental limitations for the site. First, it is on an annual lease with 30 day termination from Consumers Power Company. It probably is in no jeopardy, but the potential does exist. Another limitation is that the facility is only fair in quality -because of the rough ramp condition, dock location and informal parking. Indications are that the City of Zilwaukee cannot afford the resources to upgrade it substantially on its own, and the short-term lease eliminates grants.

Based on the character of topography and available land, one of the best parcels for a boat ramp would probably be an approximately five acre parcel at the terminus of Shattuck Road at Carrollton Road.

The site has a reasonably steady fall to the river where the bank is neither high nor steep to the river. There is ample room to provide parking and amenities. However, the site is owned by the Saginaw County Road Commission and is a future approach abutment and pier location for the Shattuck Road Bridge to replace the Sixth Avenue Bridge. The site would be rendered useless for a ramp because it would be sliced diagonally by the alignment.

A site that is only somewhat less favorable from a topographic standpoint because of a higher existing bank is some of the vacant property off Seaway Drive. There is ample room on the large parcel and launching would be into the west channel of the river, totally away from the navigation channel and any main channel wakes.

Recommendations for Public Access:

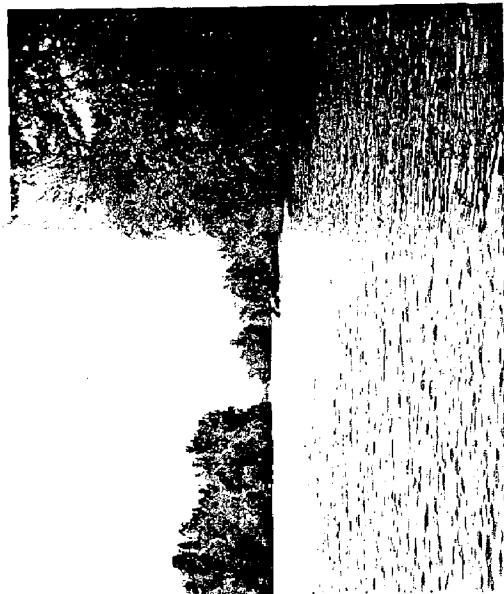
-Within this context it is recommended that public access be provided off Seaway Drive into the west channel from the Carrollton Bar. Because of anticipated moderate usage, two ramps along a central dock would be sufficient, though room for future expansion may be appropriate.

The context for recreational use of the riverfront is provided in part by a recreational analysis in the Township's comprehensive plan. That analysis found no major deficiencies in active recreation such as field sports and court sports, but it did identify a need for all passive recreation facilities including picnic areas, nature trails and scenic areas. There are no facilities for any of these uses in the entire township of 8,000 persons.

The comprehensive planning process also included a mailed out planning survey to all residences of Carrollton Township. About 16% of those residents responded by returning the form. More than half (53%) wanted to set aside vacant land for the development of parks for fishing, and boating. Eleven percent wanted the vacant land set aside as an environmentally



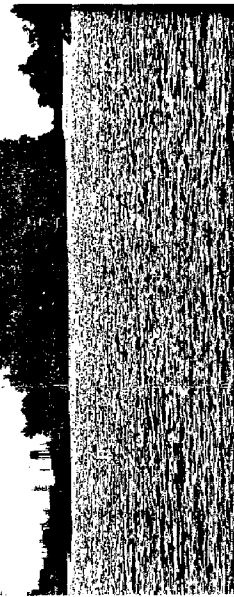
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1



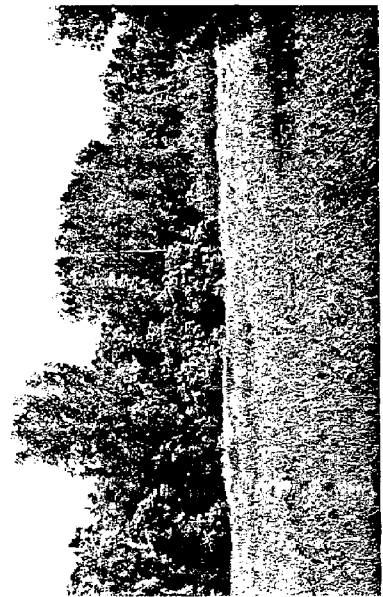
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4



6



5

CARROLLTON BAR AREA SITE: VARIOUS PERSPECTIVES

1. View Through the West Channel of the Saginaw River between the Bar and Wetlands.
2. Informal Trail Along River Bank.
3. View of Vegetation in the Cattail Marsh.
4. North End of the Carrollton Bar Looking South.
5. Open Field Between the Cattail Marsh and the Trees Along the Riverbank.
6. View of Erosion of Bar on Shipping Channel Side. The Bar was Principally Built-Up Using Dredge Spoils Prior to the 1970's.

A. Howard
Kundinger
ASSOCIATES

P.O. BOX 1143
SACRAMENTO, CALIFORNIA 95804

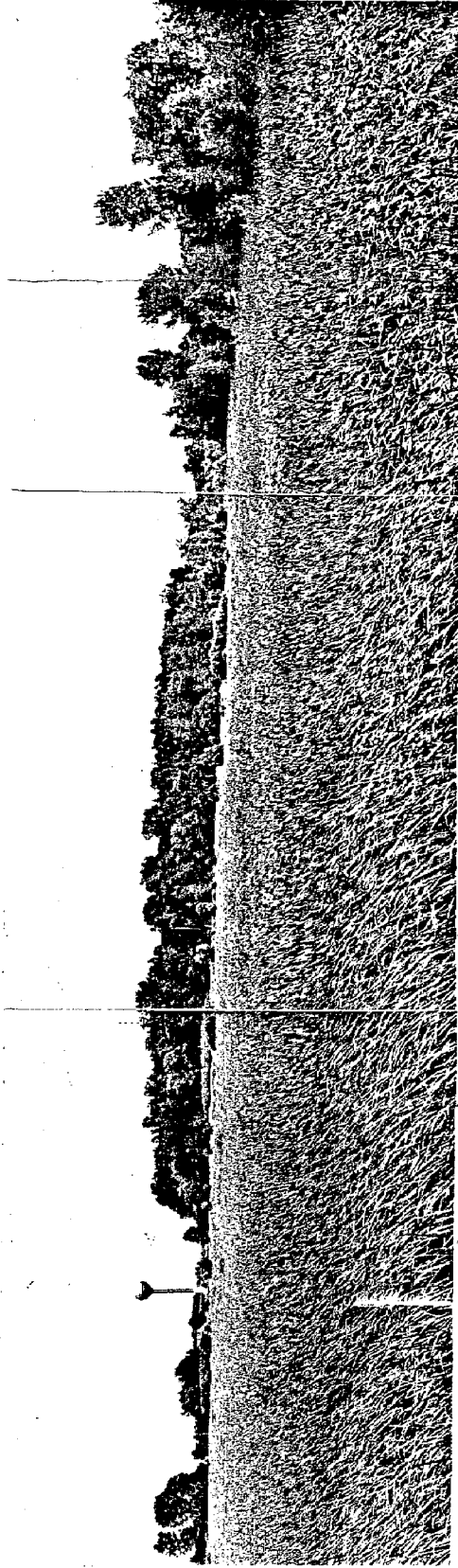
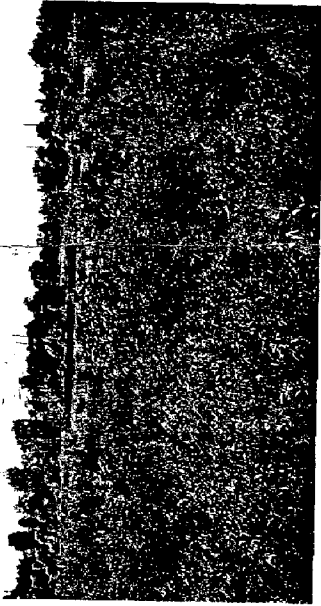
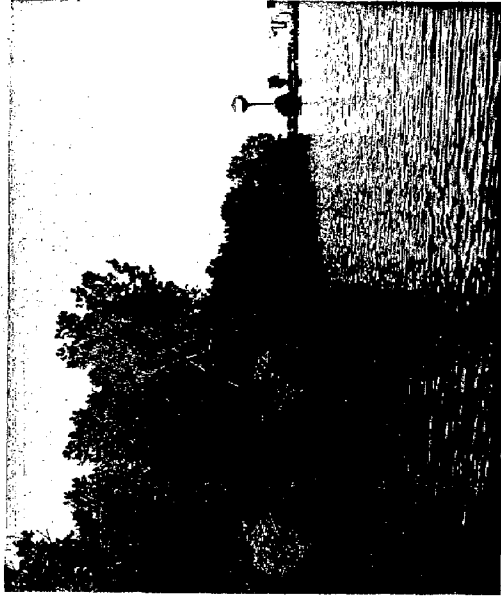


Photo showing the cattail marsh located on the site proposed for park development. This site is large enough to accommodate diverse recreational developments including: nature interpretation, fishing, hiking, boating, picnicking, organized field games, and playground. Bordered this site and located in the Saginaw River is the Carrollton Bar. This unique island could be accessed from the site and used for hiking, fishing, and picnicking.

**A. Howard
Kundinger
ASSOCIATES**

P.O. BOX 1142

sensitive area. By comparison 34% favored new river port facilities and 31% wanted commercial and industrial uses.

In examining the options for use of undeveloped land, and recognizing the unavailable land at the end of Shattuck Road, the parcel that is most readily attractive and available for meeting the identified needs and desires of the community is the large wetlands, field and island off Seaway Drive including the Carrollton Bar. The site combines the environmentally sensitive wetlands and wooded island with the field and small wooded area for picnics. An excellent trail and boardwalk system could be developed and the suggested boat launch could be integrated into the site without adverse impact.

A small vacant parcel south of the Sixth Avenue Bridge could be a small beautified entrance point to the Township. It has no significant recreation value except for potential benches overlooking the river. But it could be an attractive landscaped entrance to the Township.

If the Carrollton Concrete parcels were abandoned and not used for possible alternative uses as industry, marine terminal, private marina or private recreation/amusement, they could have some potential recreation value. They would, though, lack much in trees, shore overlook or attractive surroundings on an immediate basis.

Recommendations for Recreation

- Considering the needs and available sites, it is recommended that the Seaway Drive/Carrollton Bar site be acquired and be modestly developed into a passive recreation/nature center facility.



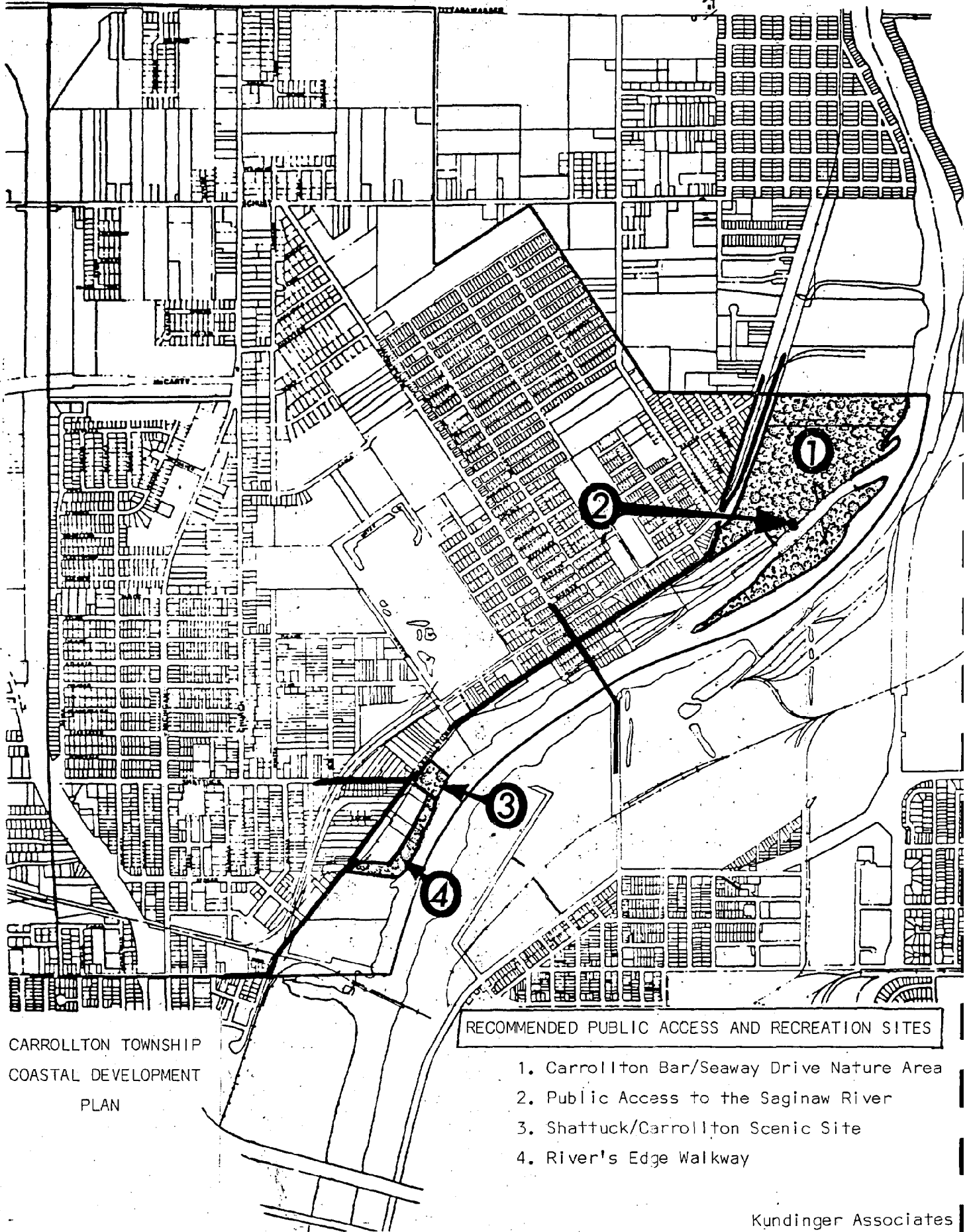
CARROLLTON-SHATTUCK OPEN SPACE SITE

This is the approximate 4 acre site located at the intersection of Carrollton and Shattuck Roads that has a good view and character along the river. The site has great potential for a simple open space or scenic area for picnics and casual boat mooring. The site is ultimately intended to be part of the approach to a proposed Shattuck Road bridge and thus is not suitable for a high investment permanent park site. A major limitation is the railroad track that precludes easy auto access. The site is already used for some informal recreation (picnics and fishing) by youngsters in the Township. Because the bridge remains a long range project, it is suggested that it be more actively used and that the informal use be somewhat structured and controlled until the bridge is constructed.

- The small site at the Sixth Avenue Bridge could be acquired and beautified as part of the total waterfront development, but utilization would only be scenic.
- A riverfront walkway is recommended behind industrial parcels from Shattuck Road south to the Schaefer Chemical Company and thence to Carrollton Road. It is recommended that this be developed in cooperation with private property owners without actual acquisition of the property.

The following map locates the proposed public recreation facilities.

CARROLLTON TWP.



CARROLLTON TOWNSHIP
COASTAL DEVELOPMENT
PLAN

RECOMMENDED PUBLIC ACCESS AND RECREATION SITES

1. Carrollton Bar/Seaway Drive Nature Area
2. Public Access to the Saginaw River
3. Shattuck/Carrollton Scenic Site
4. River's Edge Walkway

Kundinger Associates



PART IV: COASTAL AREA DESIGN CONCEPTS

PART IV: COASTAL AREA DESIGN CONCEPTS

This part of the report outlines the design concepts that are consistent with the general development plan presented. The purpose of the design concepts is to provide a visual understanding of the program and provide a basic framework for its actual implementation. The design concepts consist of preliminary sketches for the beautification of the Carrollton Road corridor and also site plans for two recommended recreation sites.

A. Carrollton Road Beautification

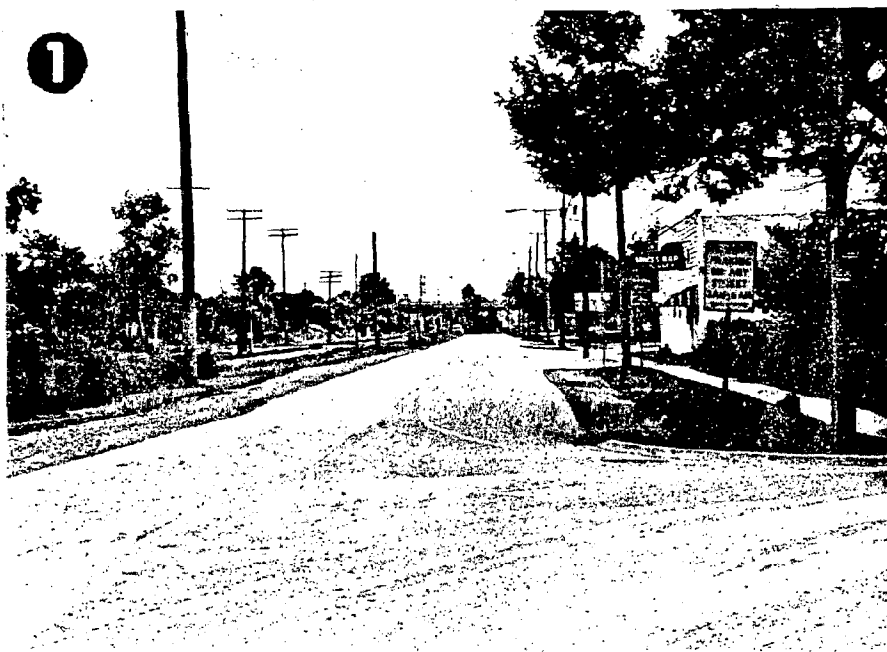
This analysis focuses on examining the public right-of-way and the visual images of private property along the roadway for all of Carrollton Road through the Township. Recommendations are then formulated to improve the physical appearance of the the road right-of-way. Since pedestrian traffic is minimal, the design emphasis will be from the perspective of the motorists using the road. The overall purpose will be develop the character of the roadway to reflect a pleasant, interesting and safe driving experience.

The predominant character of the land uses along the road are commercial and industrial. Although pockets of residential, recreational, transportation and wetland uses exist, the perceived image is strongly commercial and industrial. This interspersion of land uses together with the proximity of structures to the roadway creates a sequence of spaces. These spaces are sometimes occupied by one type of land use, but more commonly by several. The objective in the beautification is to "pull together" and unify the length of the roadway to create a single visual image rather than a diverse collection of unrelated visual images.

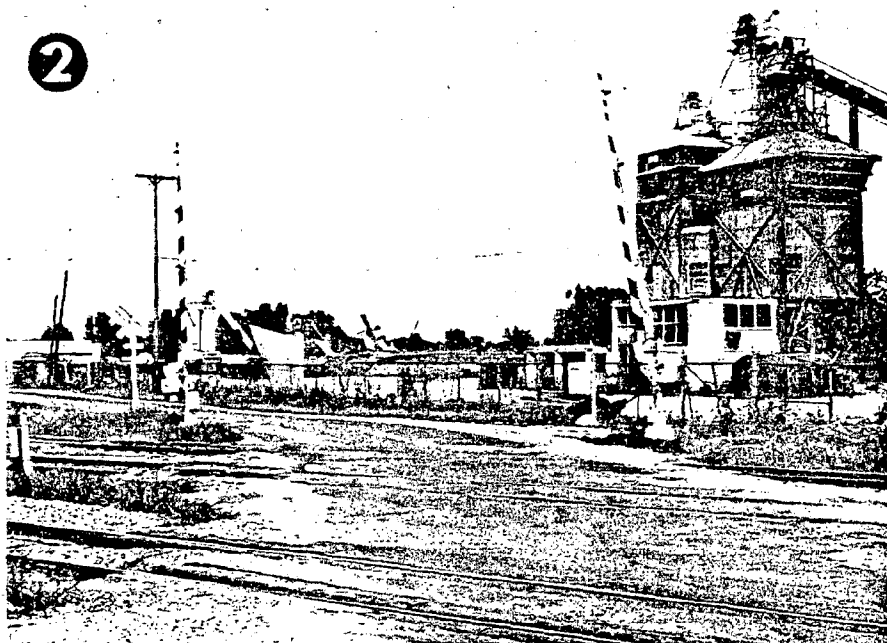
On several following sheets are descriptive commentaries and photographs of various cross-sections and features of Carrollton Road. These describe certain conditions, limitations, and opportunities available for visual enhancement along the corridor.

Major considerations in developing design concepts for improvement are established with these criteria:

- Improve roadway as required for safe, comfortable driving. This includes spot repairs on bumps and potholes as well as adjustments to track crossings and maintenance of the shoulder.
- Identify existing vegetation to be maintained and incorporated into the design scheme. Useful mature trees as well as ornamental screening shrubs such as staghorn sumac, red dogwood and tiger lily perennial groundcover can be found in various locations along the roadway. Not only are these plant materials valuable as part of the proposed landscape, but they also are indicators of plant species which are tolerant of the existing conditions.
- Encourage private business participation. Beautification need not be restricted to tree and shrub plantings. A number of commercial operations have visually interesting physical plants and technological structures. Their appearance and be positive and desirable by bright painting and/or cleanup. Objectionable views can be screened or disguised with architectural treatments. Business signage can be repaired, relocated and better identified with symbolic or logo signs in the business area. Considerable visual improvement can be achieved by simply maintaining lawns and fences, cutting weeds, picking up debris and storage of equipment and materials in an orderly fashion or out of sight. The number of alternatives available to treat the visual image of the road greatly increases if it is possible to have related improvements on private property beyond the right-of-way. In this regard it is essential to have communication and support with the businesses along the corridor.
- Examine all of the public road signage to insure is required, is in good condition and properly located.
- Utility poles and power lines are an overwhelming visual distraction in the right-of-way. The profusion of overhead wires becomes a major eyesore. On a long term basis, as the life span of existing overhead systems is realized, it is recommended that the utility companies be approached on evaluating, (1) the possibility of locating future services underground, or (2) near-term removal of poles or lines not now critical to service, or (3) relocation of poles and lines to more favorable locations, generally further from the road.



Visual improvement schemes for roadways need not be complicated and expensive. Good housekeeping practices such as grass cutting, tree and shrub pruning and litter pickup do much to enhance the landscape as well as to project a new clean image.



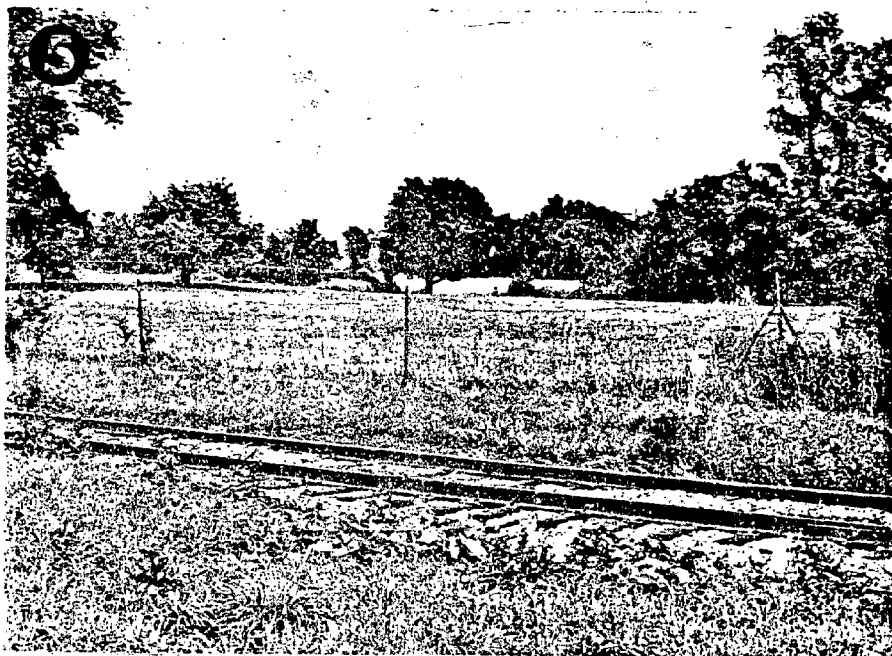
Fences, where present along the roadway, present opportunities for alternative planting solutions. If screening is desirable in these locations, vines can be planted to grow and cover the fence. Intermediate shrubs can also be used, or a combination of trees, shrubs and vines can be devised. Chain link fencing can also be treated architecturally by inserting wood slats through the mesh giving the appearance of a wooden fence. Painting chain link fencing flat black is another means of visually softening the material.



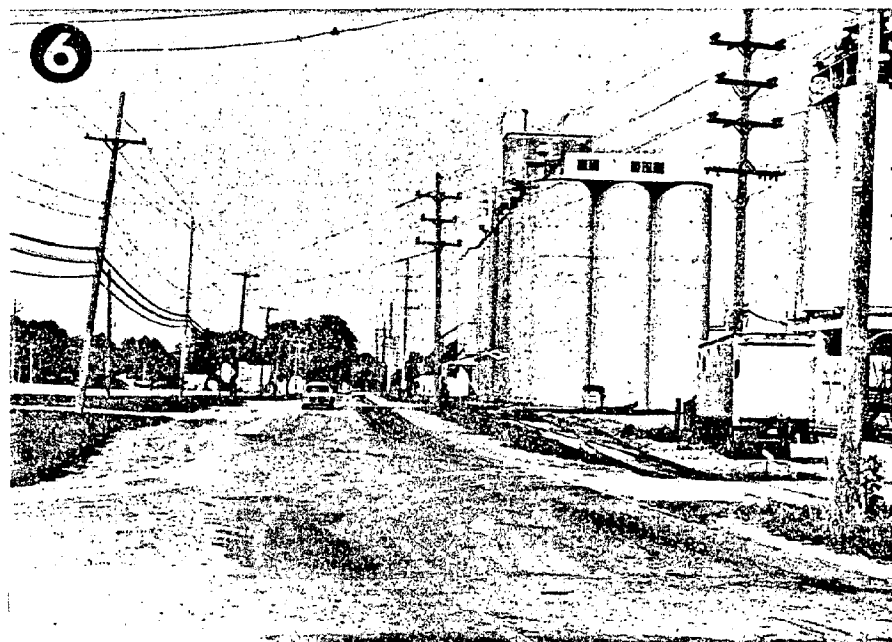
Incorporate the existing plant growth into the proposed design scheme whenever possible. Plants of value should be identified, shaped and trimmed. Valuable trees, shrubs (Staghorn sumac, red dogwood) and ground covers (tiger lily) exist along Carrollton Road.



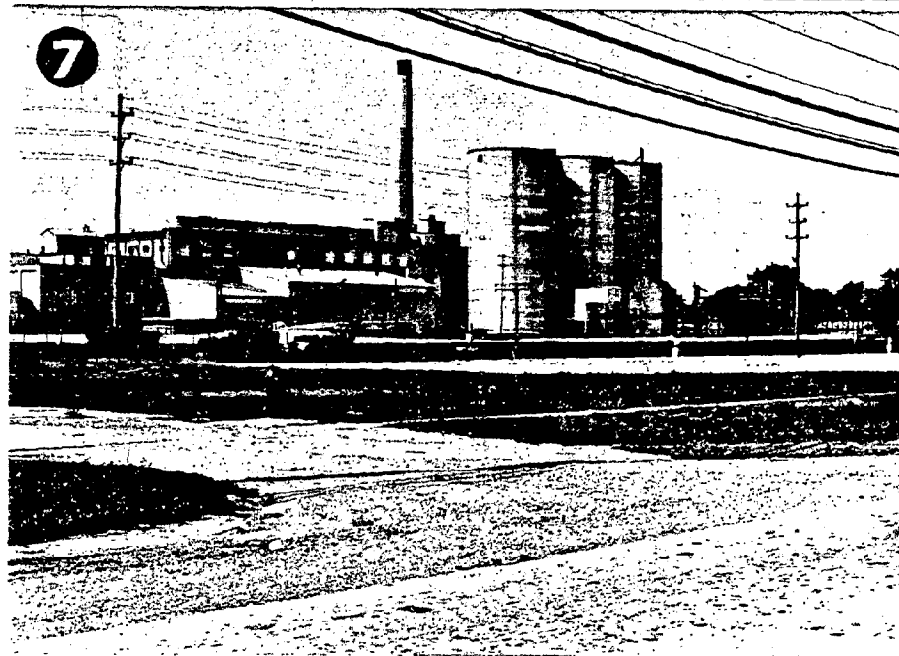
This photo shows how tree plantings define the roadway, screen and direct views and soften the edges of the road. Trees also absorb and buffer sounds and reduce temperatures making for a cooler quieter environment.



This suggested site for a township park is the only location along Carrollton Road where you are able to see the River from the road. Trees could be elevated, shrubs trimmed and the riverbank graded down to improve the views. Low key recreational activities are encouraged such as unorganized field games, picnicking and fishing. Limited parallel parking could be constructed along the roadway.



An example of loss of roadway definition along one edge due to the proximity and overlap of commercial activities. A row of trees would correct this situation by redefining the road edge. In narrow right-of-ways or planting locations an upright tree would be most suitable.

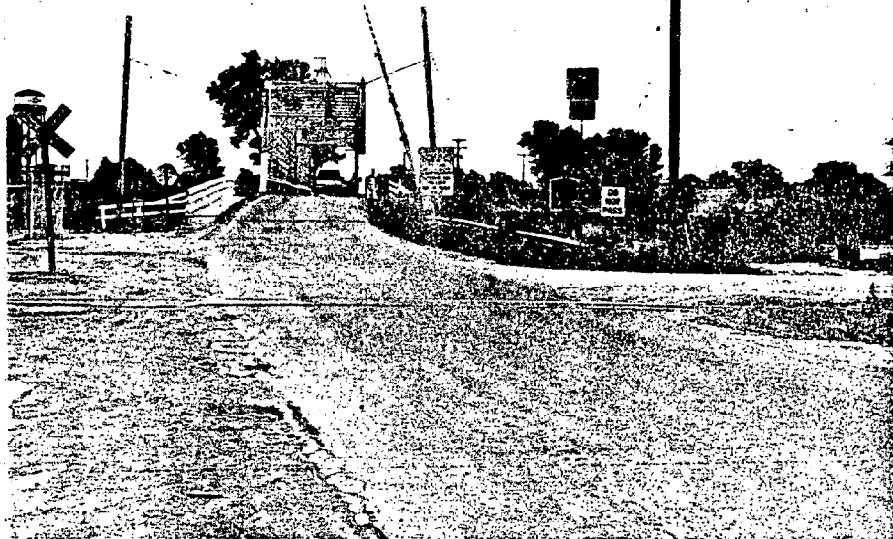


Where developments are generously set back and land is available, earth berms may be constructed to screen parking, stored equipment and materials and commercial structures.



Groupings of retail establishments can promote a separate and unique identity through special landscape treatments. Since the street spaces along the road and adjacent to these businesses are pedestrian oriented it makes some sense to provide those amenities which contribute to a pleasant pedestrian environment. Furnishings to be considered for this exterior decorating scheme include: Ornamental paving (brick or brick substitutes, concrete exposed aggregate, etc.) benches, litter receptacles, lighting, pots or planters with flowers, trees and tree grates. These amenities could be further complimented through architectural improvements to building faces and signage.

9



Evaluate signage needs. Messages along the roadway should be clearly stated and appropriately located. Too many messages are confusing. Confusing or repetitious messages are often ignored.

The township entrances along Carrollton Road could be identified using nicely designed descriptive signage.

-Identify those portions of the roadway to be landscaped. Identify the types of landscaping, trees (shade, screening or ornamental), shrubs and groundcovers applicable to the various conditions. Plant material selections consider and satisfy those specific conditions existing along Carrollton Road and include

Low nutrient soils on commercial sites.

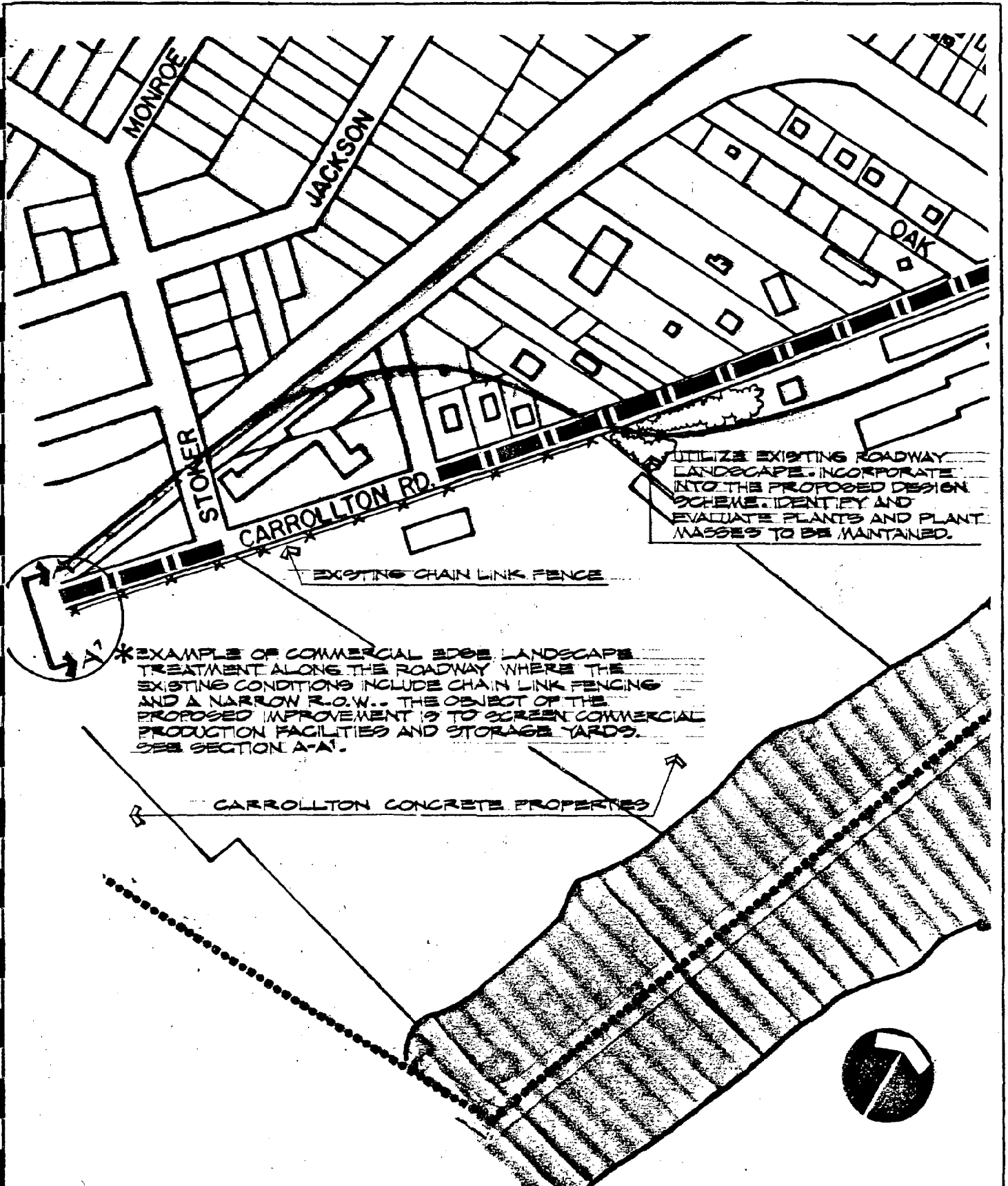
Heat from both hard surface reflectance and from commercial activity.

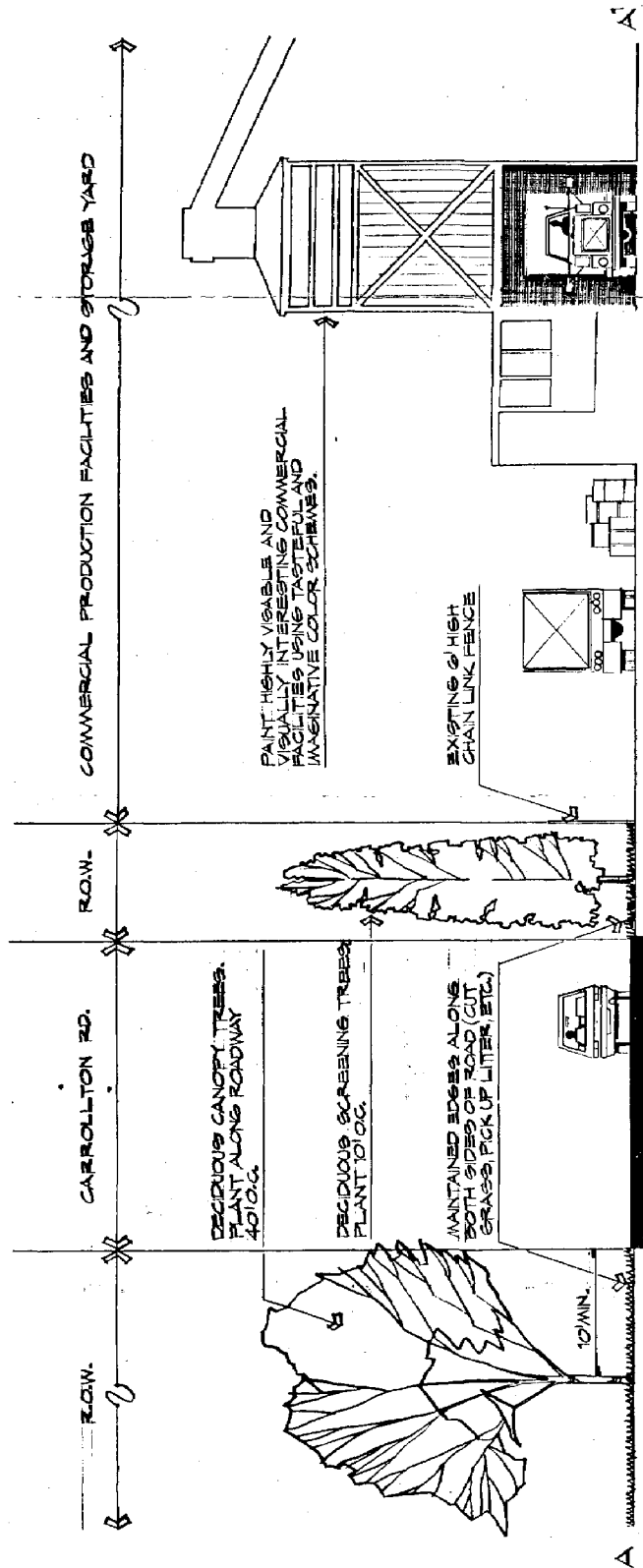
Air quality limitations for some species in select locations.

Textural qualities of various plants to absorb and buffer noises.

Based on these criteria, a series of cross-sections of Carrollton Road have been examined and preliminary designs prepared. In addition, commentary has been provided for various conditions along the corridor. This is done by the following series of annotated corridor plan maps, each of which is followed by a cross-section identified on the plan map.

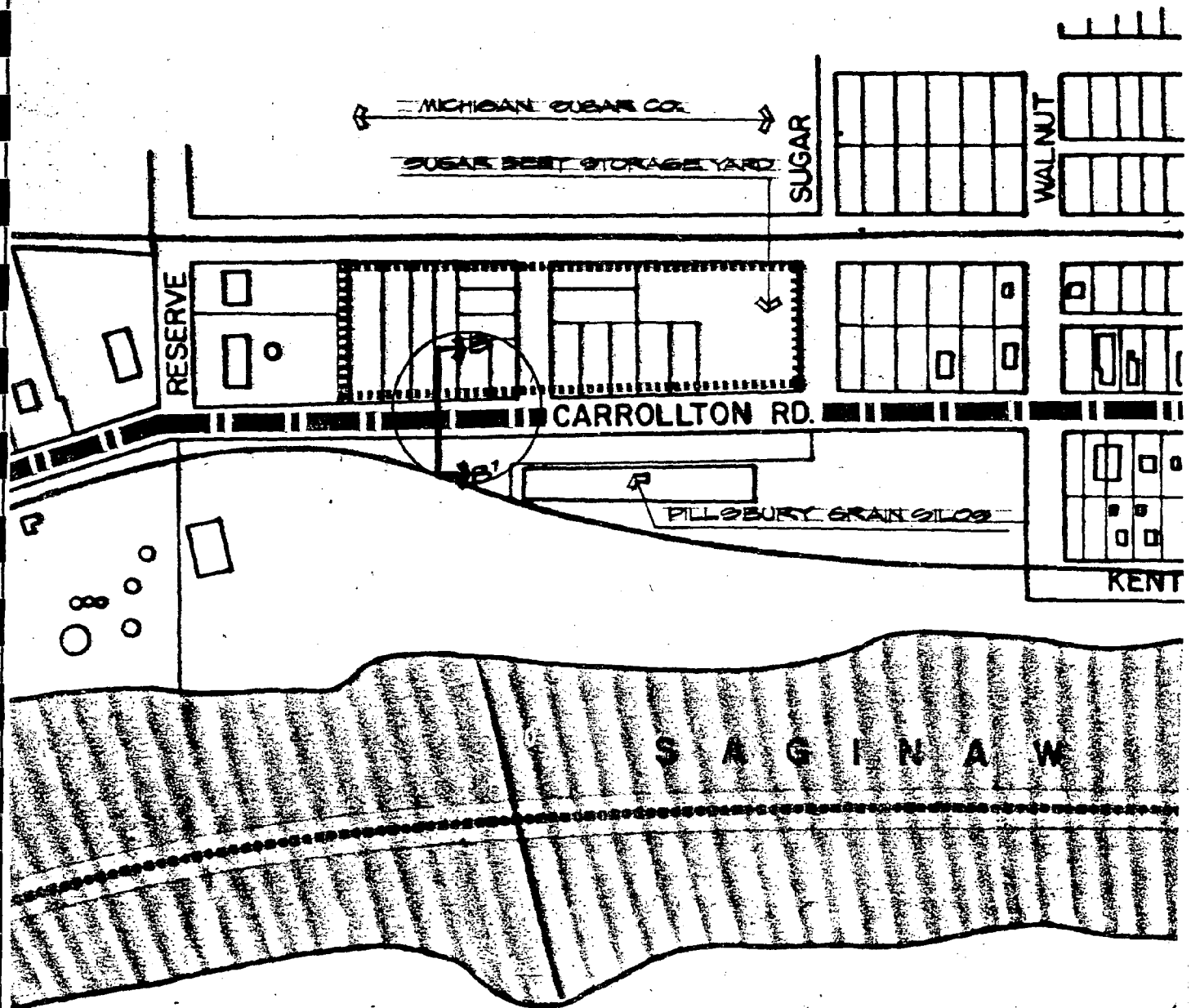
Following these maps and cross-sections is also a list of plant materials that are appropriate for the landscaping treatments recommended. The name of the material, normal planting sizes and root delivery are shown as well as remarks, which normally indicate the distance that should be maintained between the species. Current average commercial costs of the vegetation are also shown on the plant materials list.





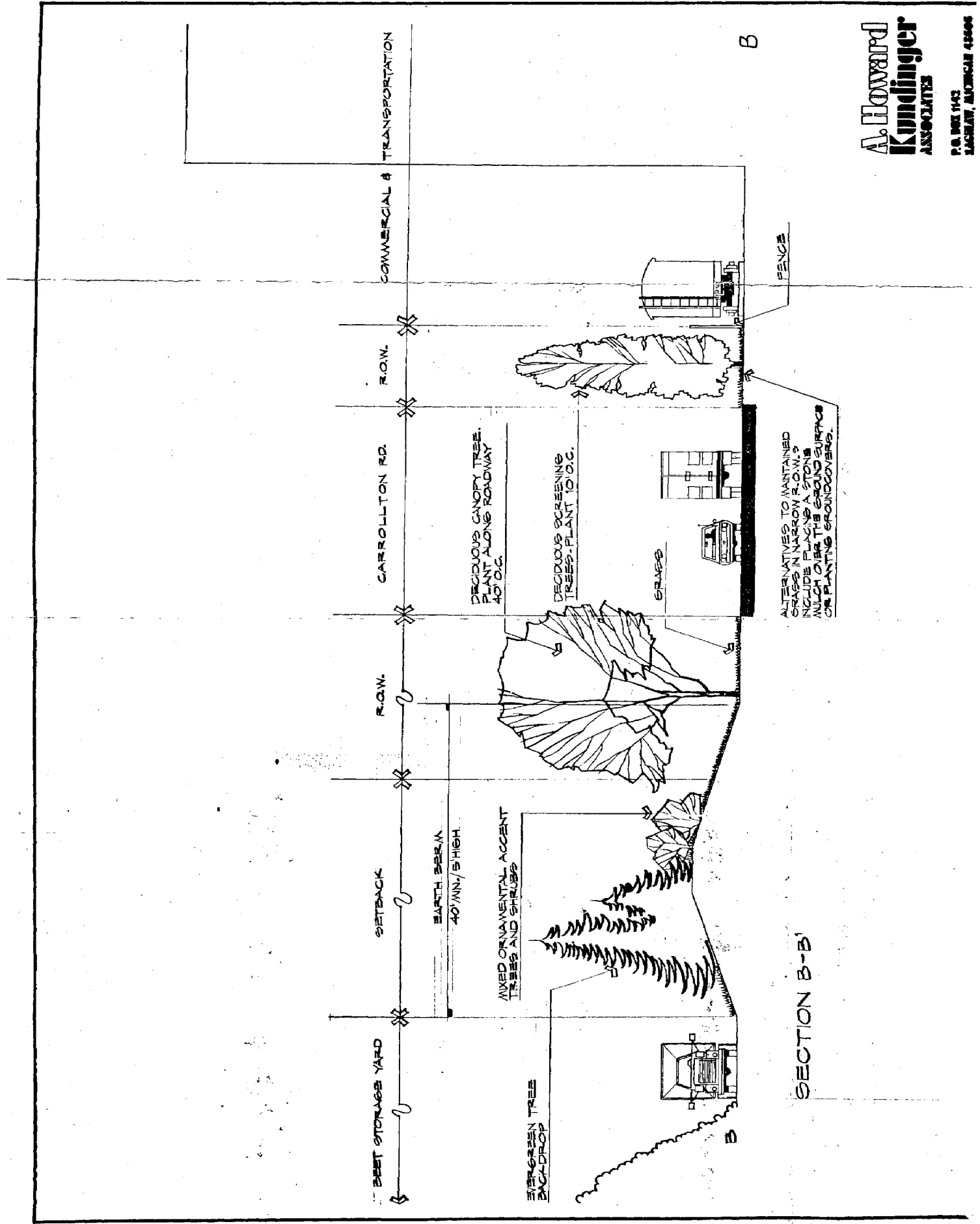
* SCREENING ALTERNATIVES INCLUDE USING UPRIGHT SHRUBS AND/OR VINES AGAINST THE FENCE AND ARCHITECTURAL FENCE TREATMENTS (EX. WOOD COVERING).

SECTION A-A'



* IN LOCATIONS WHERE SCREENING OF VIEWS IS DESIRABLE, MANY MORE ALTERNATIVES EXIST WHEN THE SETBACK OF BUILDINGS AND FACILITIES IS GENEROUS. THIS PARTICULAR LANDSCAPE TREATMENT IS AN EXAMPLE OF AN EARTH BERM USED IN CONJUNCTION WITH PLANT MATERIALS. ROADWAY EDGE DEFINITION IS ALSO REINFORCED BY LINEAR TREE PLANTINGS. SEE SECTION D-B.

PLAN MAP SHOWING
CROSS-SECTION OF CARROLLTON ROAD AT MICHIGAN SUGAR PLANT

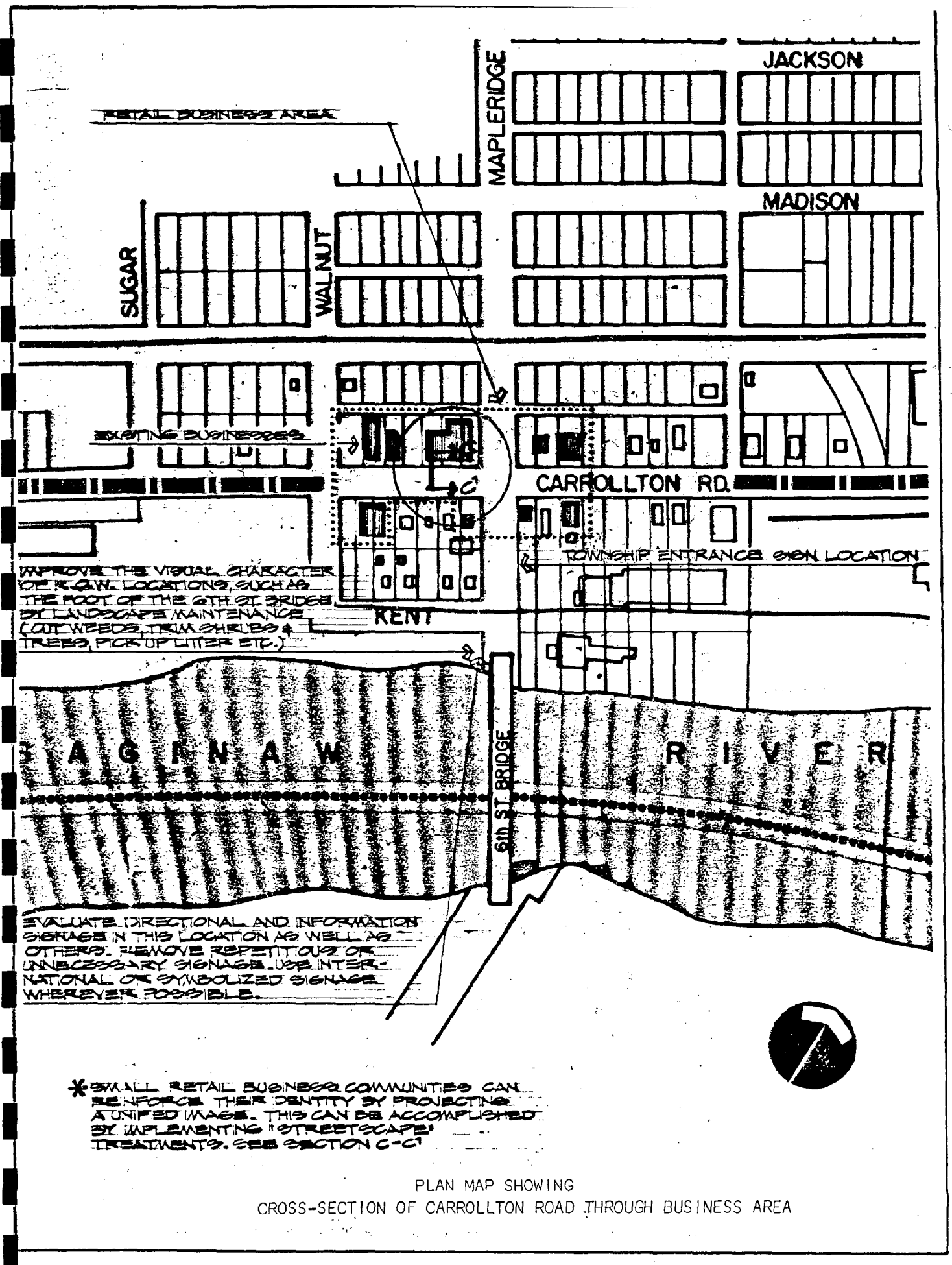


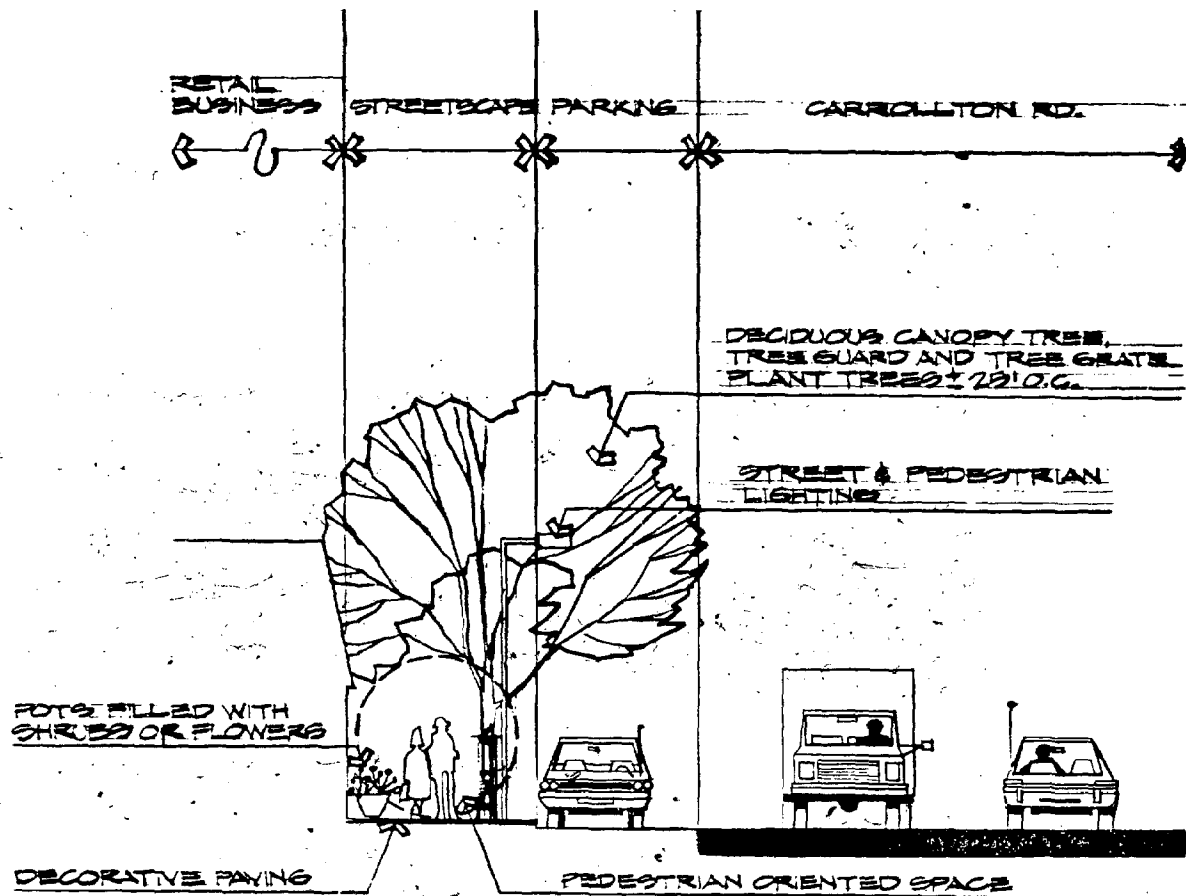
ALTERNATIVES TO MAINTAINED
 GRASS IN NARROW R.O.W.'S
 INCLUDE PLACING A STONE
 MULCH OVER THE GRASS SURFACE
 OR PLANTING GROUNDERBERRY.

SECTION B-B'

**A. Howard
 Kundinger
 ASSOCIATES**

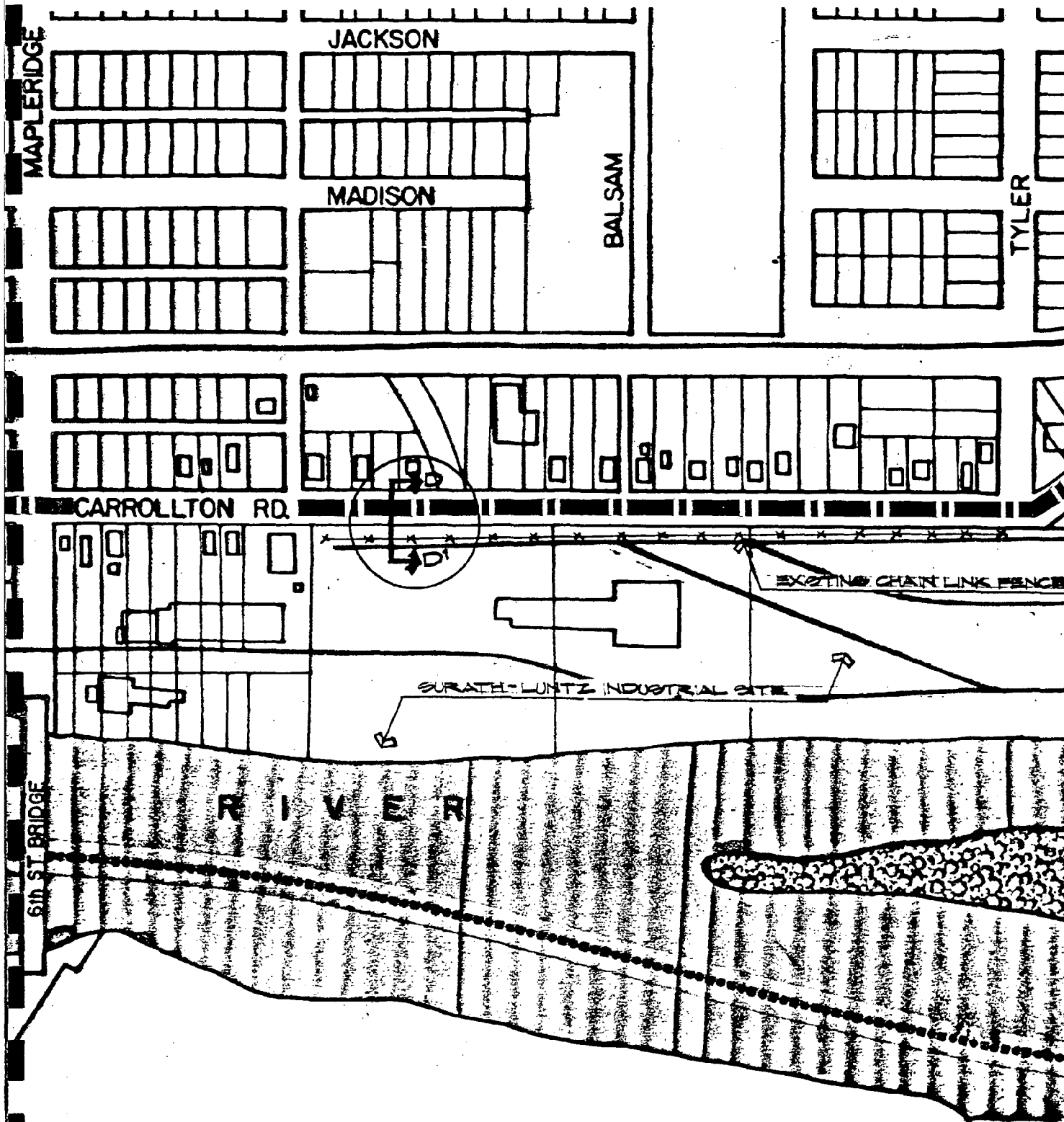
P.O. BOX 1143
 BACHMAN, MINNESOTA 55006



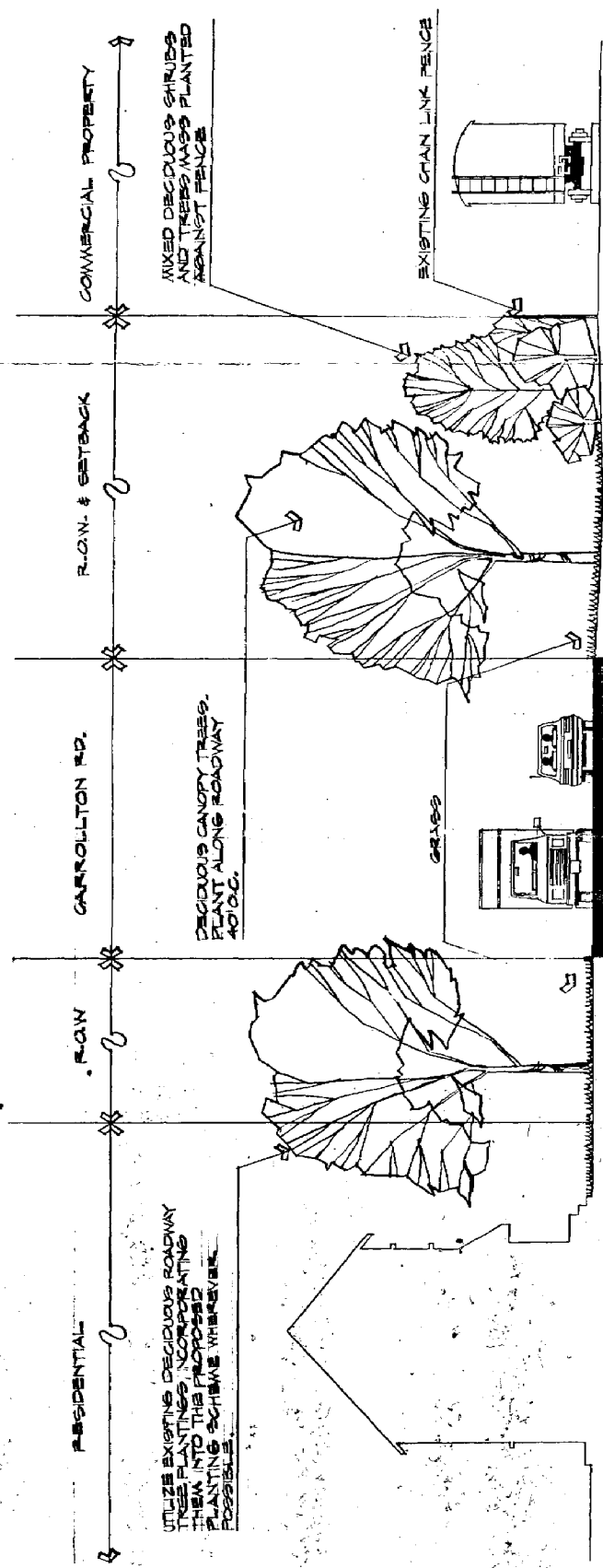


SECTION C-C

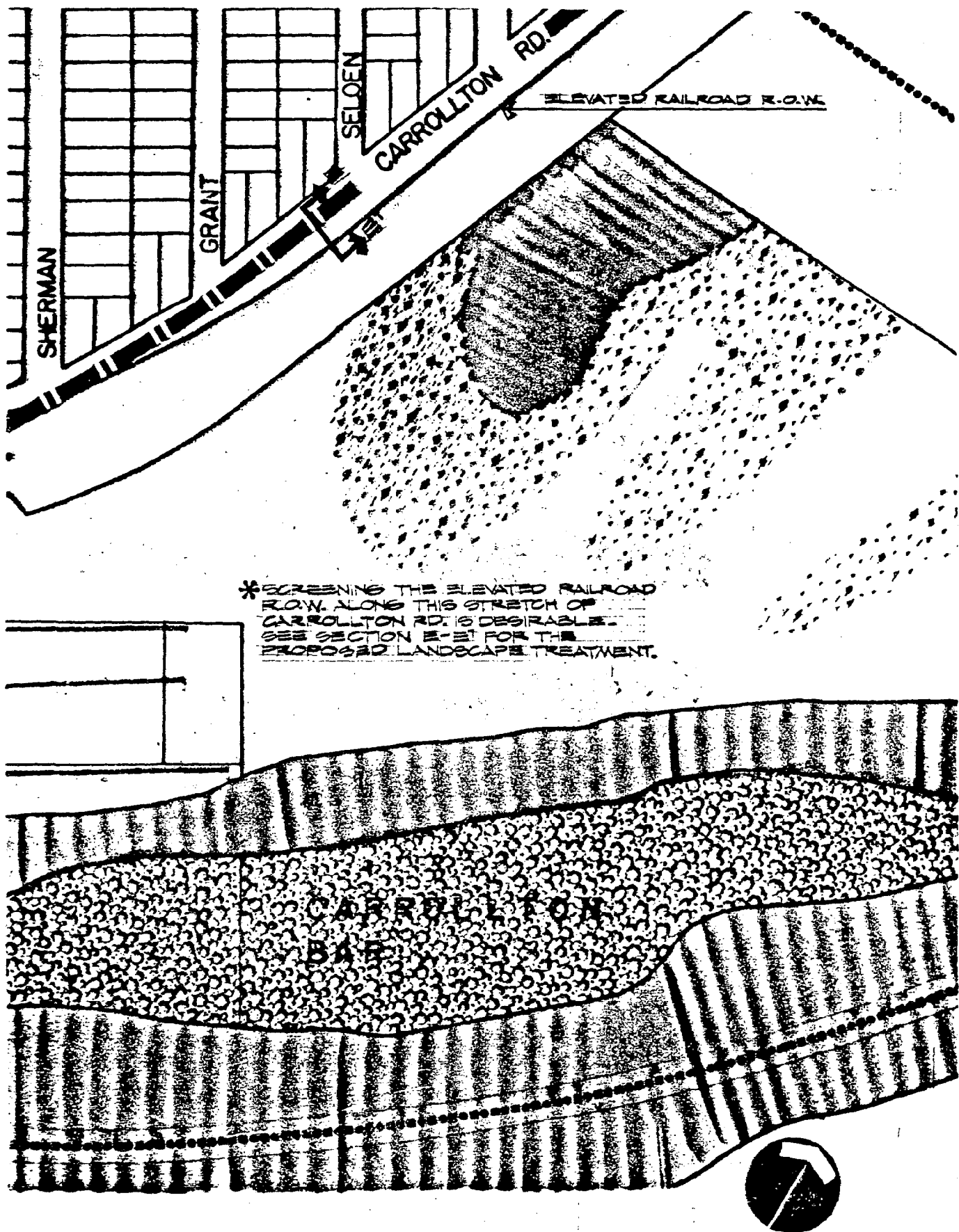
* RENOVATION OF BUILDING FACES, IMPLEMENTATION OF IMAGINATIVE AND WELL DESIGNED SIGNAGE, AND CONTROL OF ADVERTISING WILL FURTHER ENHANCE THIS DEVELOPMENT.

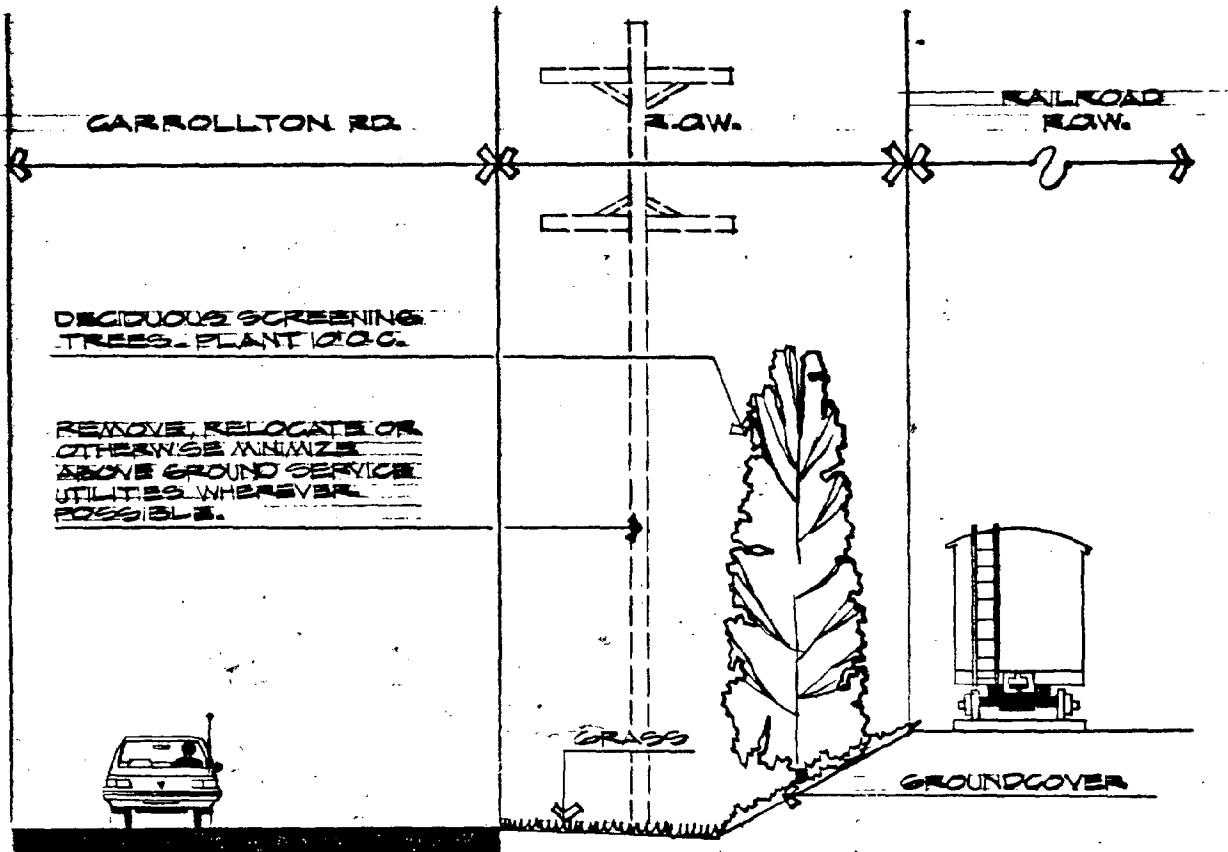


PLAN VIEW SHOWING LOCATION OF
CROSS-SECTION AT SURATH-LUNTZ MARINE TERMINAL/SCRAP YARD



SECTION D-D'





SECTION E-E'

PLANT MATERIALS LIST

DECIDUOUS CANOPY TREES:

PLANT NAME/SIZE/ROOT			REMARKS
Acer platanoides Norway Maple	3 - 3½"	B&B	Plant 40' on center
Acer Saccharinum Silver Maple	3 - 3½"	B&B	Plant 40' on center
Fraxinus pennsylvanica lanceolata 'Marshall Seedless' Marshall Seedless Ash	3 - 3½"	B&B	Plant 40' on center
Gleditsia tricanthos 'Skyline' Skyline Honeylocust	3 - 3½"	B&B	Plant 40' on center
Platanus acerifolia London Plane Tree	3 - 3½"	B&B	Plant 40' on center Spring plant only

*Average cost per tree \$300.00

PLANT NAME/SIZE/ROOT			REMARKS
Amelanchier canadensis Amelanchier	6 - 8'	B&B	Plant 20' on center
Crataegus phaenopyrum Washington Hawthorn	2 - 2½"	B&B	Plant 20' on center
Crataegus crus-galli Cockspur Hawthorn	4 - 6'	B&B	Plant 20' on center
Malus 'Snowdrift' Snowdrift Crabapple	2 - 2½"	B&B	Plant 20' on center
Prunus serrulata 'Kwanzan' Kwanzan Oriental Cherry	2 - 2½"	B&B	Plant 20' on center

*Average cost per tree \$210.00

DECIDUOUS SCREENING TREES:

PLANT NAME/SIZE/ROOT	REMARKS
Acer platanoides 'Columnare' Columnar Norway Maple 2½ - 3" B&B	Plant 20' on center
Carpinus betulus 'Columnaris' Columnar European Hornbeam 6 - 8' B&B	Plant 15' on center
Poulus nigra 'Italica' Lombardy Poplar 6 - 8' B&B	Plant 10' on center

*Average cost per tree \$125.00

EVERGREEN SCREENING TREES:

PLANT NAME/SIZE/ROOT	REMARKS
Picea abies Norway Spruce 6 - 8' B&B	Plant 15' on center Spring plant only
Picea omorika Serbian Spruce 6 - 8' B&B	Plant 15' on center Spring plant only
Picea pungens Colorado Spruce 6 - 8' B&B	Plant 15' on center Spring plant only
Pinus nigra Austrian Pine 6 - 8' B&B	Plant 15' on center Spring plant only
Pinus resinosa Red Pine 6 - 8' B&B	Plant 15' on center Spring plant only

*Average cost per tree \$150.00

DECIDUOUS SHRUBS:

PLANT NAME/SIZE/ROOT			REMARKS
Cornus racemosa Grey Dogwood	18 - 24"	B&B	Plant 6 - 8' on center
Cornus stolonifera Redosier Dogwood	18 - 24"	B&B	Plant 6 - 8' on center
Euonymus alatus Burningbush	18 - 24"	B&B	Plant 6 - 8' on center
Forsythia suspensa Forsythia	18 - 24"	B&B	Plant 6 - 8' on center
Lonicera tartarica Tartarian Honeysuckle	18 - 24"	B&B	Plant 6 - 8' on center
Rhus typhina Staghorn Sumac	18 - 24"	B&B	Plant 6 - 8' on center
Syringa Vulgaris Common lilac	18 - 24"	B&B	Plant 6 - 8' on center

*Average cost per shrub \$30.00

GROUNDCOVERS:

PLANT NAME/SIZE/ROOT			REMARKS
Coronilla Varia Crown Vetch			
Hemerocallis Daylily			
Lonicera japonica 'halliana' Halls Honeysuckle			
Parthenocissus quinquefolia Virginia creeper			
Rosa wichuriana Memorial Rose			

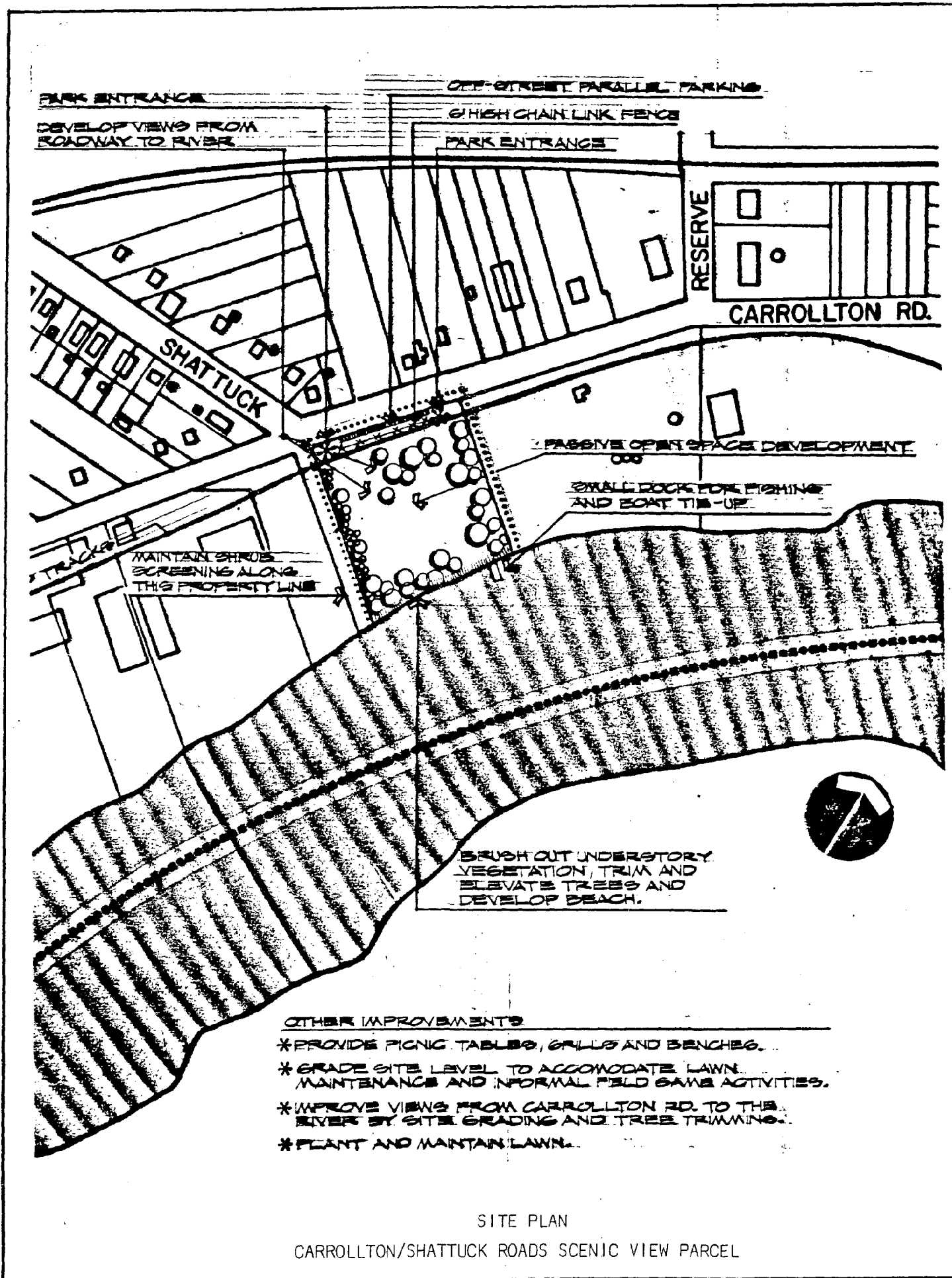
*Average cost per square foot \$3.25

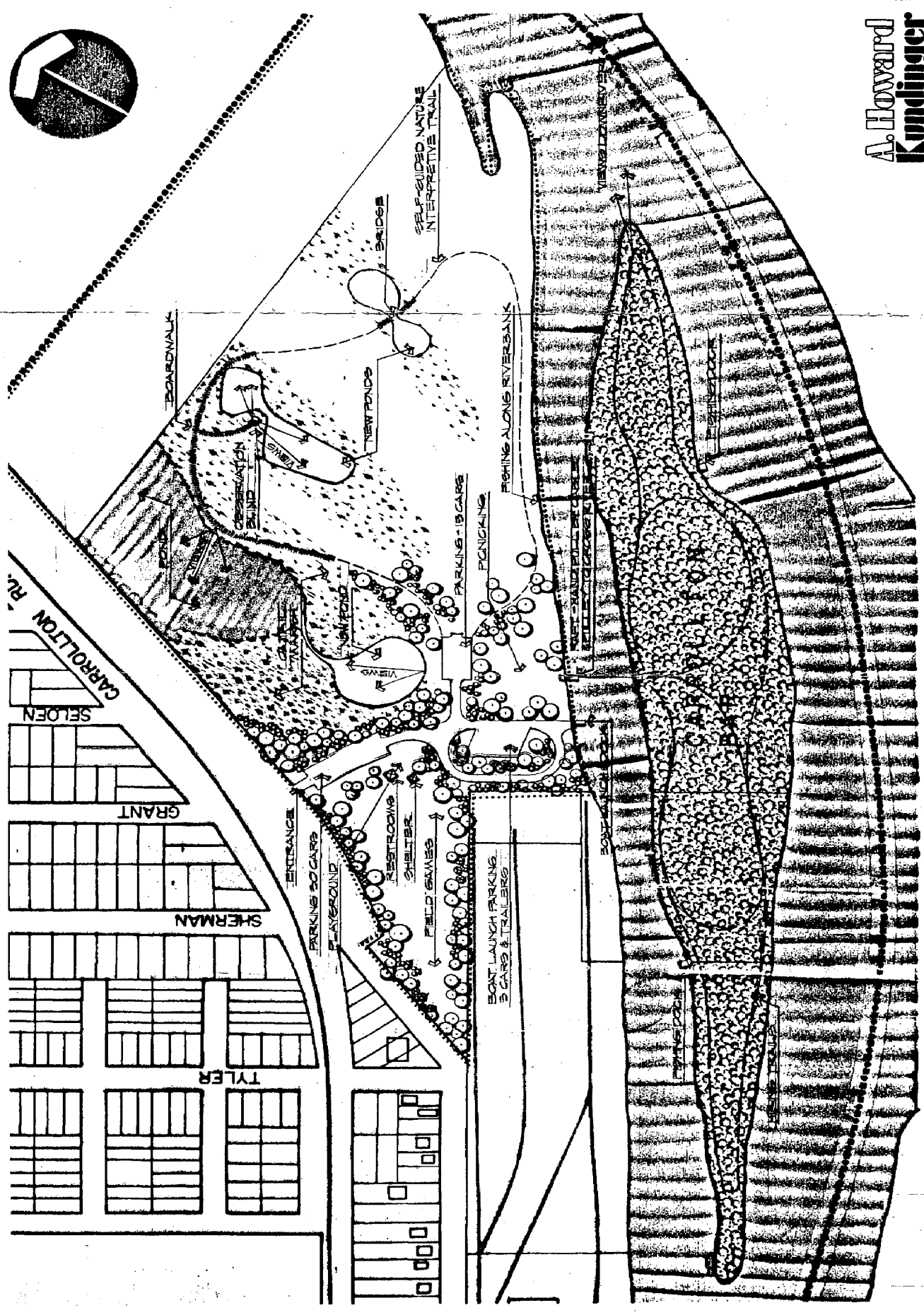
B. Riverfront Recreation Sites

The general development plan recommended two riverfront recreation sites. The first is the Carrollton Bar area where a large passive recreation facility is proposed for organized activities including picnic areas, nature trails, boat launch, nature study, shore-fishing and even open fields for pick-up sports at picnics. The second is improvement of the road commission property at Carrollton and Shattuck Roads as an interim scenic, passive enjoyment site for residents and boaters. It is recognized that this latter facility would be interim until such time as the proposed Shattuck-Fifth/Sixth Bridge were constructed.

Proposed conceptual site plans for each of these proposed recreation sites are shown on the next two conceptual site plan maps. These conceptual plan maps need not be considered as final designs but merely as one approach to integrating the proposed uses in a compatible and pleasant relationship. Any final design for such facilities would have to include a more detailed understanding of total site conditions for actual placement and character of the improvements.

Cost estimates for these recreation sites are included in the following part of this report dealing with implementation techniques. That part also gives a general priority approach for implementation sequences in developing the facilities. It should be noted that most of the equipment suggested for the Shattuck Road area site could readily be relocated to some other facility once the scenic site was displaced by bridge plans.





**A. Howard
Kundinger
ASSOCIATES**

P.O. BOX 1142
BACHMAN, ALONGAN 43606



PART V: IMPLEMENTATION TECHNIQUES

PART V: IMPLEMENTATION TECHNIQUES

As was observed by a participant in the community participation process, it is much easier to formulate plans than it is to implement them. This is true principally because the financial costs are normally high for plans that will significantly raise the quality of life in a community and also because it is a difficult managerial task in terms of managing complex public, quasi-public and private roles and responsibilities in the process. Unfortunately, that is as true for this plan as it is for any other. The purpose of this part of the plan is to describe the procedures and arrangements that might be used to achieve implementation, including the legal, financial and managerial processes. This description is addressed in terms of community involvement, capital investment, incentives and policies as well as ordinances.

A. Community Commitment and Involvement

Prior to considering any form of implementing a plan, it is very important for the community to understand the plan, recognize and agree with its values, and be committed to the plan to the extent of actively or passively supporting allocations of resources to it. It is in recognition of this that the process of developing the plan included extensive opportunities for reviewing and influencing the development of the plan. The work products of this plan are also intended to help foster additional understanding and commitment to this plan.

Once the plan is understood and accepted, it is easier -perhaps even requisite -for policy officials to work continuously for its development. And it is also easier to mobilize other community resources to help with

implementing the plan. There are, in fact, a number of potential community resources available to help with implementing some part of this plan. A summary of some such prospective community resources and their role is summarized on the following chart. The community resources identified, though, have not been contacted about this project and certainly have no commitment to it at this time. These resources are not governmental agencies or processes, but rather the public interest and civic groups that can help with implementation outside of the public arena and financing.

<p style="text-align: center;">SELECTED LIST OF POTENTIAL COMMUNITY RESOURCES</p> <p style="text-align: center;">TO ASSIST IN</p> <p style="text-align: center;">IMPLEMENTATION OF RIVERFRONT PLANS</p>	
<u>Organization</u>	<u>Potential Role</u>
Boy Scouts of America	Potential light labor donated for making trails, routine maintenance.
Ladies Farm Garden Club	Donate small amounts of money for beautification
Carrollton Lions Club	Manpower from club members and/or financing of specific improvements.
Northwest Kiwanis Club	Same as above.
Second National Bank Trusts	Major or minor philanthropic grants serving educational or social purpose
-Boutell Memorial Fund	
-C.K.Eady Family Memorial Fund	
-Michael Jeffers Memorial Fund	
-Francis Gall Mills Fund	
Wickes Foundations	Major philanthropic grants serving educational or social purposes. This has been used for a number of major park improvements in the City and in Saginaw Township
Major Township-based corporations such as Pillsbury, Michigan Sugar, Luntz, Carrollton Concrete, the asphalt companies and others.	Possible voluntary beautification of their own properties consistent with these concepts.

B. Capital Investment Sources

The community resources identified previously are extremely important in mobilizing attitudes, providing manpower and in setting up seed money. Normally, though, they cannot provide enough resources to do the job on their own. Basically there is a need for major money sources to implement the projects. Some generalized cost estimates have been prepared for both of the proposed recreation sites. These estimates assume total implementation of the plan by contractors. It is possible to reduce these costs by having simpler plans or by using some volunteer labor and/or donated materials.

No costs are shown for land acquisition, which is typically a major investment. This is because:

- The Carrollton Bar area has been proposed for 100% funding for acquisition by the Michigan Land Trust Fund under a grant.
- The Shattuck Road site is currently owned by the Saginaw County Board of Road Commissioners. It is planned for eventual use for the new Shattuck Bridge. The intent is simply to suggest an interim use.
- The riverfront walkway from the south Township limits to Shattuck Road as describe in the general development plan is not proposed as fee simple acquisition. Rather Act 116 Open Space Easement, low-cost leased easements, donation by property owners or similar method. Obviously any such arrangement must provide the property owners with measurable advantage for becoming involved in such an arrangement.
- The Carrollton Road beautification is suggested for just the public road right-of-way or as individual projects by the property owners.

A major concern is to leverage as much funding for these developments as possible to minimize the investment required by the Township of Carrollton. This in no way indicates a lack of interest by the Township, which has consistently encouraged such improvements. However the local financial base for the Township is strained when it faces replacement of aging infrastructure, a modest industrial tax base, and increasing demands for police and fire protection.

Carrollton Area Coastal Planning Project

CARROLLTON ROAD BEAUTIFICATION COST ESTIMATES

Grading (Various Locations)	\$ 50,000.00
Trees and Vegetative Cover (Entire Corridor)	150,000.00
Streetscape Improvements (Business Area Only)	60,000.00
<u>Signs and Miscellaneous Amenities</u>	<u>5,000.00</u>
TOTAL	\$265,000.00

TOTAL ALL COST ESTIMATES

Carrollton Bar Area Riverfront Park Site	\$385,000
Shattuck Road - Carrollton Road Scenic Site	25,000
Riverfront Walkway	40,000
Carrollton Road Beautification	<u>265,000</u>
TOTAL	\$715,000

Carrollton Area Coastal Planning Project

PROPOSED RECREATION SITES COST ESTIMATES

SITE #1: CARROLLTON BAR AREA RIVERFRONT PARK SITE

	First Priority	Second Priority	Third Priority
1. Roadway and parking lot development	\$ 40,000	\$ 45,000	-----
2. Restrooms	75,000	-----	-----
3. Shelter	25,000	-----	-----
4. Grading	-----	25,000	-----
5. Boat launch and skid pier	-----	40,000	-----
6. Three docks	-----	6,000	-----
7. Raft transportation system	-----	-----	10,000
8. Trail system on Carrollton Bar	-----	-----	6,000
9. Amenities: Benches, picnic tables, grills	4,000	2,000	2,000
10. Development of the nature trail system, ponds signage et.	25,000	25,000	25,000
11. Security lighting	-----	10,000	-----
12. Playground	-----	10,000	10,000
	-----	-----	-----
SUB-TOTAL	\$169,000	\$163,000	\$53,000
	-----	-----	-----
TOTAL			\$385,000

Carrollton Area Coastal Planning Project

PROPOSED RECREATION SITES COST ESTIMATES

SITE #2: SHATTUCK ROAD/CARROLLTON ROAD RIVERFRONT SCENIC SITE

	First Priority	Second Priority	Third Priority
1. Develop parallel parking along road (grade and gravel)	-----	\$ 5,000	-----
2. Install 6' chainlink fence	-----	2,000	-----
3. Site grading	-----	4,500	-----
4. Trim Trees, remove undesirable trees and shrubs.	-----	3,500	-----
5. Plant Grass	-----	2,500	-----
6. Install amenities including, benches picnic tables, grills, signs and riverfront dock (no launch, though).	-----	5,000	-----
7. Security lighting.	-----	2,500	-----
	-----	-----	-----
SUB-TOTAL	-----	\$25,000	-----

SITE #3: RIVERFRONT WALKWAY (South Limits to Shattuck Road)

1. Install chainlink fence	-----	-----	\$ 10,000
2. Grading	-----	-----	3,000
3. Trail Development	-----	-----	20,000
4. Gates, Signs & Amenities	-----	-----	5,000
5. Landscaping & Miscellaneous	-----	-----	2,000
	-----	-----	-----
SUB-TOTAL	-----	-----	\$ 40,000
	-----	-----	-----
TOTAL SITES 2 AND 3			\$ 65,000

GRAND TOTAL SITES 1,2 AND 3			\$450,000

Accordingly, grants, trust funds and community involvement must be programmed to the maximum extent possible. This is done on several prospective capital improvement summaries for the Carrollton Bar Area, Shattuck/Carrollton Scenic Site and the Corridor Beautification. These should not be assumed to represent the only program that can succeed, but rather to demonstrate the mix of efforts that can be used to implement the project. The final mix would, of course, depend on the availability of funds from these various sources. The Township of Carrollton is assumed to have up to \$10,000 annually for a successful program.

C. Public Incentives

One of the best approaches to implementation is to use incentives or leverage public investment. The sites will simply require the mix of many funds to be properly constructed. But with the Carrollton Road corridor beautification a number of incentives are possible to reduce public investment. These include:

- Whenever a riverfront or Carrollton Road frontage property owner seeks local government assistance in terms of tax relief or financing, it should be a stipulation of the incentive that a landscaping, beautification and amenities plan consistent with this study concept be part of the approval requirements. The most common incentives are:

- Michigan Economic Development Corporations Act (338 of 1974) which provides financing through tax exempt bonds.

- Michigan Plant Rehabilitation and Industrial Development Districts Act (198 of 1974), which allows for frozen assessments for rehabilitated plants or reduced (up to 50%) taxes on new plants.

- Commercial Redevelopment Districts Act (255 of 1978) which provides frozen assessments or reduced taxes in commercial areas.

- Require conformance to beautification in order to take advantage of potential benefit from state or federal grants. Carrollton is eligible for a number of state and federal grants that could benefit property owners. The Township could offer to seek such grants to benefit property owners if they agreed to also implement the beautification program.

CAPITAL IMPROVEMENTS PROGRAMMING

Carrollton Coastal Development Plan

CARROLLTON ROAD CORRIDOR BEAUTIFICATION

<u>First Priority Improvements</u>	<u>Second Priority Improvements</u>	<u>Third Priority Improvements</u>
First priority area would be Carrollton Road from Hickory St. north to Township Limits because: -Partial implementation started by Luntz Corp. -Significant residences in area. -Easiest, most cost-effective to complete.	Area from south Township limits to Sugar Street because next most cost-effective area to be completed.	Business area from Sugar St. and from Saginaw River to westernmost railroad tracks.
Cost estimate: \$100,000	Cost estimate: \$110,000	Cost estimate: \$ 55,000

Financing sources are variable. Generally the options include governmental expenditures by the Township, special assessment districts, public-private joint financing, federal or state grants or combinations of these. For areas where businesses are changing operations, expanding, building new or otherwise needing bermits, then implementation can be accomplished by zoning ordinance site plan review or by stipulations to receive Act 338 financing or for creation of an industrial district.

CAPITAL IMPROVEMENTS PROGRAMMING

Carrollton Coastal Development Plan

CARROLLTON ROAD CORRIDOR BEAUTIFICATION

First Priority Improvements (1985 & 1986)	Second Priority Improvements (1987 & 1988)	Third Priority Improvements (1989 & 1990)
Land Acquisition by the Michigan Land Trust Fund.	Trailer/Vehicle Parking, Boat Launch with Skid Pier and Grading: \$110,000	Raft Transportation System, Playground, and Development of Trail System, Ponds & Signage tracks: \$45,000.
Roadway & Parking Lot Development, Restrooms & Shelter: \$140,000.	- \$55,000 Waterways DNR - \$20,000 Township Funds - \$15,000 Community Fund Raising - \$20,000 Philanthropic	- \$22,500 LAWCON Grant - \$12,500 Township Fund - \$10,000 Community
- \$70,000 LAWCON Grant - \$40,000 Philanthropic - \$15,000 Community Fund - \$15,000 Township Funds		
Amenities - benches, tables, grills, etc. \$ 4,000	Three Boat Docks and Amenities: \$8,000.	Trail System on the Carrollton Bar and Amenities: \$8,000.
- \$4,000 Service Clubs	- \$8,000 Service Clubs	- \$8,000 Service Clubs
Development of Trails, Ponds & Signs: \$25,000	Development of Trails, Ponds & Signs: \$25,000	
- \$15,000 Donated Labor - \$ 5,000 Township Funds - \$ 5,000 Service Clubs	- \$25,000 Philanthropic Security Lighting and Playground: \$25,000.	
	- \$15,000 Donated Labor and Materials - \$ 5,000 Corporate Donations	

This assumes a \$10,000 Annual Appropriation by Township; Availability of Existing Federal and State Funding Programs; Interest and Resources from the Philanthropic Trusts, Service Clubs, Community Groups and Area Businesses.

CAPITAL IMPROVEMENTS PROGRAMMING

Carrollton Coastal Development Plan

SHATTUCK/CARROLLTON ROADS RIVERFRONT SCENIC SITE

First Priority Improvements (1984)	Second Priority Improvements	Third Priority Improvements
Develop Gravel Parking Area Parallel to Carrollton Road and Grade Site: \$ 9,500.	No Further Activities	No Further Activities
- \$9,500 Donate Labor and Materials from Corridor Business	Anticipated	Anticipated
Trim Existing Trees, Remove Undesireable Vegetation, Plant Grass: \$6,000.		
- \$6,000 Man Hours, Some Materials From Service Clubs		
Install 6' Chainlink Fence, Security Lighting, & Amenities: \$9,400*.		
- \$ 5,000 Township Funds		
- \$ 4,500 Township Funds		

*These capital assets to be designed for maximum ability to relocate to the Carrollton Bar Area site if and when the Shattuck Road Bridge were to be built on this site.

Zoning decision-making and management could be used to trade possible variances for appropriate beautification or to trade concessions during site plan review of new or expanded projects. Site plan review can also be used on its own to require conformance.

It may be possible to acquire easements on some riverfront property using Act 116 Open Space Preservation provisions to grant tax relief in exchange for public use. There is not a good precedent for this, but it would appear to be consistent with the act.

Individual and informal agreements between the Township and the property owners could also be based on particular circumstances. For example, a major property owner could agree to make certain significant private beautification efforts providing the Township makes certain improvements in the public right-of-way.

These incentives can be very effective if properly used in a positive and cooperative framework. Strong corporations find that an attractive physical environment is conducive to the total image and substance of success and the total impact of individual improvements makes the community correspondingly more attractive.

D. Ordinance Changes

Another way for Carrollton Township to approach implementation is to examine what changes may be considered in its ordinances to enhance implementation. Because of the legal authorities available to Townships, the principal vehicle for control is the Township's Zoning Ordinance. Fortunately, the Township has just completed revising its zoning ordinance in a manner that does benefit implementation. The key revisions were:

- Flood damage protection requirements that are designed to limit and set standards for developments in the floodway or floodway fringe of the Township. This is important because the entire coastal area is in the floodway fringe and because the Township participates in the federal flood insurance program.

-A new zoning district was developed for "Marine Development" of the coastal area. This district is specifically designed to encourage marine terminal uses and public or private recreation developments in the zone.

-Site plan review procedures are included and now are available to insure that landscaping and beautification of properties can now be required for new or expanding developments

It is expected that these new ordinance changes will provide the best legal incentives and controls for sound development in the coastal area. They should, however, be monitored in the future to insure that they meet their intent and the area's needs.



APPENDIX

LITERATURE REVIEW

Summary of Key Conclusions

SAGINAW RIVER PORT DEVELOPMENT STUDY

PHASE I REPORT

June 1980

Transportation and Economic Research Associates, Inc.

Arlington, Virginia

and

Johnson, Johnson & Roy/Inc.

Ann Arbor, Michigan

"...Coastal Zone Management Act of 1974... stated purpose is to "...
preserve, protect, develop, and where possible, to restore or enhance the
resources of the nation's coastal zone.'"

"The purpose of this study was to determine the long-term need for
commercial, industrial, and recreational use of the Saginaw (River), in
order to identify development opportunities and design an integrated
development plan. Our intent was to provide a plan with an appropriate
balance of commercial and recreational uses, consistent with good coastal
zone management practices."

I SUMMARY AND CONCLUSIONS

Below are only those aspects of the study that have some significant

relevance for the Carrollton Coastal Management Study.

"This study's findings and recommendations from the Port Project chapter are:

"(11) This study has identified significant benefits from providing deeper channels for grain and stone shipments. The costs of providing a deeper channel to Saginaw may produce a low-priority benefit/Cost ratio, and at best, this improvement could require many years to accomplish. New marine terminal facilities should be located at Bay City."

"The traffic forecasts indicate that tonnage could approximately double between 1980 and the year 2000, to about 6,000,000. That is predicated on successful promotional efforts to improve channel depths and provide additional grain, fertilizer, and pellet handling facilities. ... Between 2000 and 2020, the forecasts indicate that port tonnage may more than double again, to over 16 million tons. ... Largely it is predicated on the return of utility coal shipments via vessels.

"(1) Most opportunities for port traffic growth are in agricultural commodities - grain, pellets, fertilizers.

"(2) Construction materials traffic - stone and cement/cement clinkers - will grow only modestly.

"(6) The three agricultural commodity improvements will

require facility additions - the most significant of which will be for grain, preferably in the Bay City area.

- "(8) More intensive use of the waterfront is possible at almost all locations on the river. To some extent, the availability or Seaway depths at Bay City would encourage this because of the value of the property. Non water-dependent industry will find more economical sites elsewhere.
- "(9) The study did not identify any significant need for riverfront sites for water-depent industry, based on the resources of the area. Multi-user marine terminals and recreation related facilities appear to be the highest and best use of most of the waterfront.
- "(11) The study did identify the potential general cargo overseas traffic of the Saginaw - and identified the service and rate disabilities that must be overcome to revive this formerly important port traffic. With the caveat, that this may burden the agency with a hopeless cause, the study recommends promotional efforts by a port organization.

"The study's findings and recommendation - from the Recreation Demand Analysis are:

- "(13) In the mid-river zone, there is a near-term need for a boat launch oriented to fishing activities. A long term need exists

to continue expansion of the linear parks on the east bank for fishing, hiking and senic recreation activities.

"(14) The study recommends pursuing the opportunity to develop a boat launch within Veterans Memorial Park. (Note: Since constructed)

"(15) The study recommends development of fishing modes, designated pathways and scenic overlooks within the east bank linear park, and extension of the designated pathway through the industrial zone of Northern Saginaw - not necessarily always along the waterfront.

"(16) In the Saginaw area, there is a near-term need for a boat launch in the north Saginaw area, and a need for transient docking facilities near downtown.

"(17) The study recommends acquisition of vacant properties on the west riverbank at the I-675 interchange for a boat launch with adequate parking and vehicle access, and inclusion of a transient mooring facility in Saginaw's plans for its urban waterfront park.

"(18) The study recommends that the communities of Zilwaukee and Carrollton acquire and develop water oriented parks on available vacant land near their residential and commercial districts.

"... The following recommendations have more general application.

"(2) Building plans along the river should be reviewed to prevent screening-off of the river whenever possible. ...

"(3) Where there is competition between recreational and commercial uses for the waterfront, an acceptable solution is to limit the recreation facility to a passive viewpoint. Generally the big commercial ships are an attraction when working cargo, and viewpoints are needed. A mixture of small craft and large vessels is to be avoided.

"(4) Where use of the waterfront is minimal, a linear park is appropriated. ...

"(6) Because of canalization of the Saginaw, many of the indentations that would have been desirable for moving development have disappeared. Because of the constriction of the channel, marina developments should be inland, into basins, and not out into the water. Building into the water is cheaper than digging into the land, and the permits are easier to obtain. The marina builders may not appreciate this recommendation, but we hope it makes the permits easier to obtain."

Several useful charts and plan maps from this study are attached.

LITERATURE REVIEW

Summary of Key Conclusions

SAGINAW RIVER PORT DEVELOPMENT STUDY

September 1980

Transportation and Economic Research Associates, Inc.

Arlington, Virginia

and

Johnson, Johnson & Roy, Inc.

Ann Arbor, Michigan

This follow-up implementation plan summarizes the Phase I Report as noting "...significant new investment in marine terminal facilities if needed, should be made along the lower reach of the river, Bay City/Grand Trunk. Western Bridge to Bangor/Essexville, because of the transportation economics from deeper water and better prospects for continued channel maintenance and improvement there." It also said "A formal port organization is needed to provide project advocacy and initiative, and liaison between the Federal and local interests."

"The Port Development Programs addressed in this study are the Port Project, Spoil Disposal and Port Promotion." The port project consists of an export grain elevator and multi-purpose bulk terminal in the Bay City area. No project is suggested for Saginaw or Carrollton. A spoils area was suggested for an area in Zilwaukee Township, well north of Carrollton. Promotion would be the responsibility of a new port commission consisting of Saginaw and Bay Counties. Thus, this Phase II report does not significantly address any issues that directly impact the Carrollton program.

Literature Review and Key Comments

LONG-RANGE TRANSPORTATION PLAN

September 1982

Saginaw Metropolitan Area Transportation Study

"The Saginaw River Port Study recommends that the majority of Saginaw County's vacant waterfront be used for recreational purposes. Because most available land is in parcels too small for industrial development, linear parks and boat launches would make an appropriate use of the land. The Consumers Power Marine Terminal located north of the I-75 Bridge should be maintained for water related industry. Existing port facilities should be retained and upgraded and their links to overland transportation improved.

"The eastern riverbank's most important overland transportation connection is M-13. This four lane state highway provides access to the riverbank, the business districts of Bay City and Saginaw, and to I-75. The western riverbank is considerably more isolated. In Zilwaukee Township, access is provided by Melbourne Road, a two lane gravel road. County primary roads and city streets provide access for the remainder of the riverbank under discussion. Access to I-75 from the west side is available in the City of Zilwaukee.

"One of the most pressing questions facing the Port of Saginaw is that of dredging. The costs and benefits of dredging to Sea-way depth and the problem of spoil disposal are complex issues involving a number of governmental units."

This study also summarized some of the key statistics and conclusions of the previously referenced Phase I state report.

OTHER LITERATURE REVIEW

1. BENEFITS OF EXTENSION OF THE NAVIGATION SEASON TO TWELVE MONTHS FOR THE PORT OF BAY COUNTY FOR THE 1976-80 PERIOD, May 1975, Saginaw Valley State College Department of Economics

This publication deals with the "Port of Bay County" (actually the entire Saginaw River port) in terms of economic advantages. The report utilizes a number of assumptions about loss or gain of port activity due to a shorter season, but does not address key issues such as keeping the entire Saginaw River open to Saginaw as opposed to just into Bay City. It also tends to slight the "captive" character of agricultural and aggregate products. These respond to growing locations and local market demand more than to quality or duration of port season. The study also does not effectively compare water transport with the alternatives of rail and truck, which might become more cost-effective irrespective of port operations. The study does conclude that there is considerable advantage in a possible year-round port and that the local areas should continue to examine its inputs and promote its realization.

2. MICHIGAN'S COMMERCE DOMESTIC AND INTERNATIONAL, 1966, Michigan Department of Commerce

Although this was an interesting and fairly-well documented study, its useful is now questionable because of the great changes in the shipping environment since 1966. It is not specifically useful for this Carrollton Township Study because it deals with Michigan and the Great Lakes as an aggregate rather than specific ports.

Literature Review
Potential Marina Development
AN INVENTORY OF POTENTIAL SITES FOR
GREAT LAKES PUBLIC MARINAS
AND BOAT LAUNCHING RAMPS

This document was prepared by the Michigan Coastal Management Program "... to locate and inventory potential sites on navigable waters of the Great Lakes for future recreational marinas and launching ramps which can provide boaters access to the Great Lakes. ... In addition, it will serve as a reference to various committees and local government planners in pinpointing certain areas which were particularly suited to the needs of the recreational boating public."

"CRITERIA IN SITE SELECTION

"An effort was made to examine each prospective site from all aspects. Some of the elements considered in the selection of each marina site include:

- . Its location in regard to the area's general concentration of pleasure craft.
- . Compatability with zoning and land use regulations and future plans of the local unit of government.
- . Compatability with adjacent land uses.
- . Compatability of recreational boating with commercial shipping, where applicable.
- . Water depths; Distance from harbor entrance.
- . Observations of soil and shoreline conditions.
- . Availability of utilities - sewer, water, electricity.

- . Cost or land value if privately owned."

Distance from harbor entrance is probably the principal reason that Saginaw County and Carrollton Township are not noted for such a site for marinas or launching facilities. Additional criteria for launching facilities in the study are noted below.

"Criteria for launching facilities include the above items in general, as well as:

- . Considerations for hard surfaced ramps to accomodate large trailerable craft, with a minimum water depth of 2 1/2 feet at 20 feet from shore.
- . Acreage available for parking of cars and trailers and a minimum water frontage based on the following table:

Car-Trailer Units	Acres	Min. Frontage
25	1.5	200 ft.
50	2.0	200 ft.
75	3.0	260 ft.
100	4.0	320 ft.

The summary of observations for Bay and Saginaw Counties in this report is:

"BAY - SAGINAW COUNTIES

"Shallow water along the west shore of Saginaw bay from Bay City has created problems at all launching sites. For example, the cement, deep water boat launching facility at the mouth of the Pinconning River is presently restricted to boats which have a draft of less than 18 inches. Submerged pilings in this low water create an additional hazard for small craft launched at this site.

"There are no natural rivers, lakes or inlets which contain sufficient water for marina docking along this west shore.

"The Saginaw River with its width and depth, is shared by both commercial and recreational vessels with little or no conflict. It is a popular recreational port with public and commercial docking within the first few miles from the mouth for approximately 1,000 boats. These facilities appear to be at or very near capacity with waiting lists for docking space at most marinas.

"There are two deep water launching sites, one on the west side of the river at the Bay City Veteran's Memorial Park and the other on the east side of the river at Essexville. Combined they can accomodate parking for less than 100 vehicles and trailers."

LITERATURE REVIEW

RELEVANT PORT COMMENTS

STATE of MICHIGAN COASTAL MANAGEMENT PROGRAM
AND FINAL ENVIRONMENTAL IMPACT STATEMENT

July 1978

U. S. Department of Commerce

Water Transportation Areas - Problems and Program Concerns

"Specific concerns of the Coastal Management Program relative to coastal water transportation areas include:

"To avoid environmental and economic loss, careful planning and analysis is needed to determine the impacts of future port development.

"To serve the future needs of development in the coastal area there is a need to establish a comprehensive transportation planning mechanism.

"Recent efforts to extend the navigation season, the trends to larger vessels requiring increased water depths for passage and increase of channel and harbor maintenance requirements pose formidable challenges to the state's water transportation system. Comprehensive transportation planning must fully consider all impacts of vessel movement upon the coastal area."

COMMENTS BY LARRY KARNES,
MARINE TRANSPORTATION PLANNER
MICHIGAN DEPARTMENT OF TRANSPORTATION

August 9, 1983

Saginaw River future crowded by:

1. Potential for system user fees now proposed as
 - A. Uniform nationwide (good for MI but unlikely)
 - B. Based on Ad Valorem value of cargo, or
 - C. No fees under 45' of draft (very good for MI)
2. Rail deregulation will make rail cheaper and potential greater use of unit trains by both Farm Bureau and Pillsbury.
3. Vessel availability very limited - only about half a dozen Canadian ships that can work the Saginaw for grain.

Best potential for increase.

1. Surath-Luntz scrap yard - type facilities.

Note that an interview of terminal operators completed half a year ago found that for the Saginaw and other ports, there is tremendous existing excess capacity. TERA study is still best literature.

Saginaw is a small port that is by far the least active of the Great Lakes grain ports.

COMMENTS BY:

RAY LAWRENCE, WATERWAYS DIVISION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

1 - 322 - 1311

Mr. Lawrence's responsibility is primarily for moorings and marinas. I asked him about whether it is desirable (and likely to get permits) to put a marina in the west channel of Carrollton Bar.

Marina:

Physically no problem as long as no interference with navigation.

Might be wake problems. Would suggest open finger-piers.

Marketing uncertain - they have no pressure or knowledge of such a marina being wanted. Even a proposed boat launch in Essexville was considered too far from the Bay. Uncertain about pleasure craft demand for river alone. (Advised I found no market).

Boat Launch:

Usually not a problem to put in a launch, though shore topography could be a factor.

Market again uncertain as state has no pressure for any such facility.

August 10, 1983

COMMENTS BY JERRY BREEN, DIRECTOR SAGINAW COUNTY

ECONOMIC DEVELOPMENT COMMISSION

Carrollton can play a significant role in economic development of urban Saginaw. Primary opportunities are in marine terminal and industrial. Rail also an asset.

Key attractive parcel is Carrollton Concrete, which could alternatively be:

- Marine Terminal
- Industrial
- Amusement
- Marina

Phone discussion as of August 10, 1983

COMMENTS BY JON MERSMAN, DIRECTOR

SAGINAW COUNTY METROPOLITAN PLANNING COMMISSION

Best bet is maintenance of existing river port activities - expansion not likely.

Concept of complementary amusement off of Sawmill is appropriate. Otherwise Marina terminal or industrial is best for Langschwager (Carrollton Concrete area) property.

Consider possibility of a Weiss Street Bridge accross the Saginaw River, as is under some consideration by Saginaw Metropolitan Area Transportation Study.

Phone discussion on August 10, 1983

SUMMARY OF PUBLIC MEETING COMMENTS
CARROLLTON COASTAL MANAGEMENT PLANNING PROGRAM

Monday, August 22, 1983 - 7:00 PM
Carrollton Township Offices 1645 Mapleridge Road
Saginaw, Michigan 48604

Chairman Pete Zechmeister opened the public hearing at 7:10 PM. He briefly described the purpose of the study and then introduced Howard Kunding, the planning consultant retained by the Township to assist it with the study. Approximately 35 people attended.

Mr. Kunding briefly outlined the scope, process and substance of the federally funded study, which focuses on economic development (commercial and marine terminal), environmental and recreational opportunities and beautification of Carrollton Road. It was noted that marine terminal development and commercial growth are not likely to be a major factors. There are, though several potential recreational sites. And some simple road corridor improvements are possible. The major uncertainties along the waterfront are possible port user fee and/or elimination of dredging; the possible closing of the Sixth Avenue Bridge and a new crossing at Shattuck or possibly even Weiss Roads; and a possible new educational-visitor project proposed immediately south of the Township in the City of Saginaw. Implementation can include grants, philanthropic offerings, service club involvements and Township appropriation.

Comments by residents and business owners in attendance were as follows;

with responses following the comment.

-Flood plain problems are very major at the properties cited as appropriate for recreation according to one property owner.

Mr. Kundingger agreed that a flooding condition exists and said that the recreation would be passive in nature such as trails, picnic areas, nature study and activities and facilities not seriously impacted by flooding.

-A resident inquired as to the size of the Carrollton Bar in acres.

Mr. Kundingger said measurement depends on whether associated wetlands are included and the time of year, but that the 20 acres range is appropriate.

-One citizen commented that it is possible to plan, but how could the plans be implemented.

It was explained that the Michigan Land Trust Fund is being solicited to acquire the Carrollton Bar and wetlands. Other state and federal grants are still available as are private trusts and service groups in addition to Township resources, which are limited.

-Carrollton Road is so unattractive that parks may be also unattractive according to one citizen.

The beautification plans proposed can be simple, relatively inexpensive and effective according to Mr. Kundingger. He explained some of the techniques.

-Mr. David Warner of Coastal Programs Unit of the Michigan Department of Natural Resources introduced himself. He spoke to the primary uses of the riverfront for marine ports, recreational and specialized, water-oriented uses. He felt that the proposed recreation uses were most compatible with flood plains and have been used as such in other communities. He noted, the educational and natural values of the wetland and Carrollton Bar are very attractive for such uses. Mr. Warner also stated that beautification of the road corridor and possible waterfront corridor parks have been very effectively used in other communities. The proposals are consistent with good riverfront management according to him. Furthermore, implementation can go far simply by using service clubs, garden clubs and other local groups to stimulate road beautification.

Mr. Warner also, commented that both the Waterways Division and Fisheries Division can be helpful in implementation. He advised that certain permits are required for any riverfront development.

Chairman Zechmeister asked for a show of hands for those favoring Carrollton

Road beautification. Somewhat more than half approved, no one objected. Regarding recreation uses and possible public access, an estimated two-thirds supported such development. One person was opposed to recreation and public access because the State Health Department advises against eating any Saginaw River fish.

Chairman Zechmeister called for additional comments. Being none, he concluded the public meeting for the coastal management study.

Recorded by Howard Kunding.



Michigan Natural Features Inventory

Stevens T. Mason Building
Post Office Box 30028
Lansing, Michigan 48909
517 / 373-1552

July 26, 1983

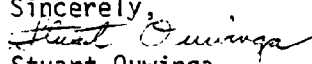
A. Howard Kunder Associates
Box 1142, Saginaw, MI. 48606

Thank you for your letter of July 22. We have map-checked and computer-checked the area of concern to you--the Carrollton Bar vicinity--and have found no occurrences of endangered, threatened or "special concern" species in the vicinity.

As to Saginaw County: in addition to the Bald Eagle we have records for a number of plant species of concern. None of these, so far as we know, occurs in the Carrollton area. But, for your records, they are: Habenaria leucophaea (Prairie Fringed Orchid)--state endangered, Isotria verticillata (Whorled Pogonia)--special concern, Habenaria flava (Tubercled Orchid)--special concern, and Trillium viride (A Trillium)--state threatened. This last species is not to be confused with the very common White Trillium (T. grandiflorum).

The data which you supplied appears to be adequate for your purposes. The lists of endangered species are being revised as our program continues to research the matter. The ones which you supplied are still applicable so far as the Saginaw River area is concerned.

We hope we have been of service to you and that you will continue to find our data adequate to your purposes.

Sincerely,

Stuart Owning
Data Manager,
Michigan Natural Features Inventory

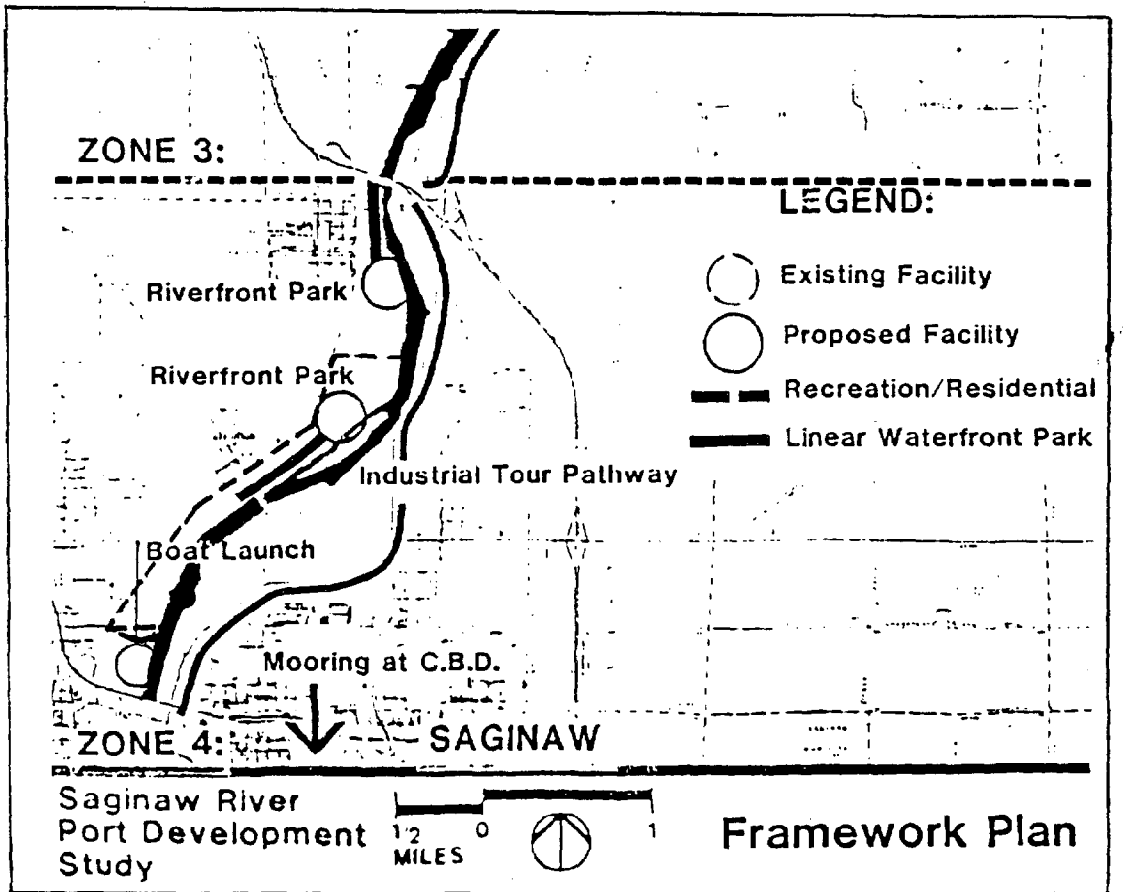
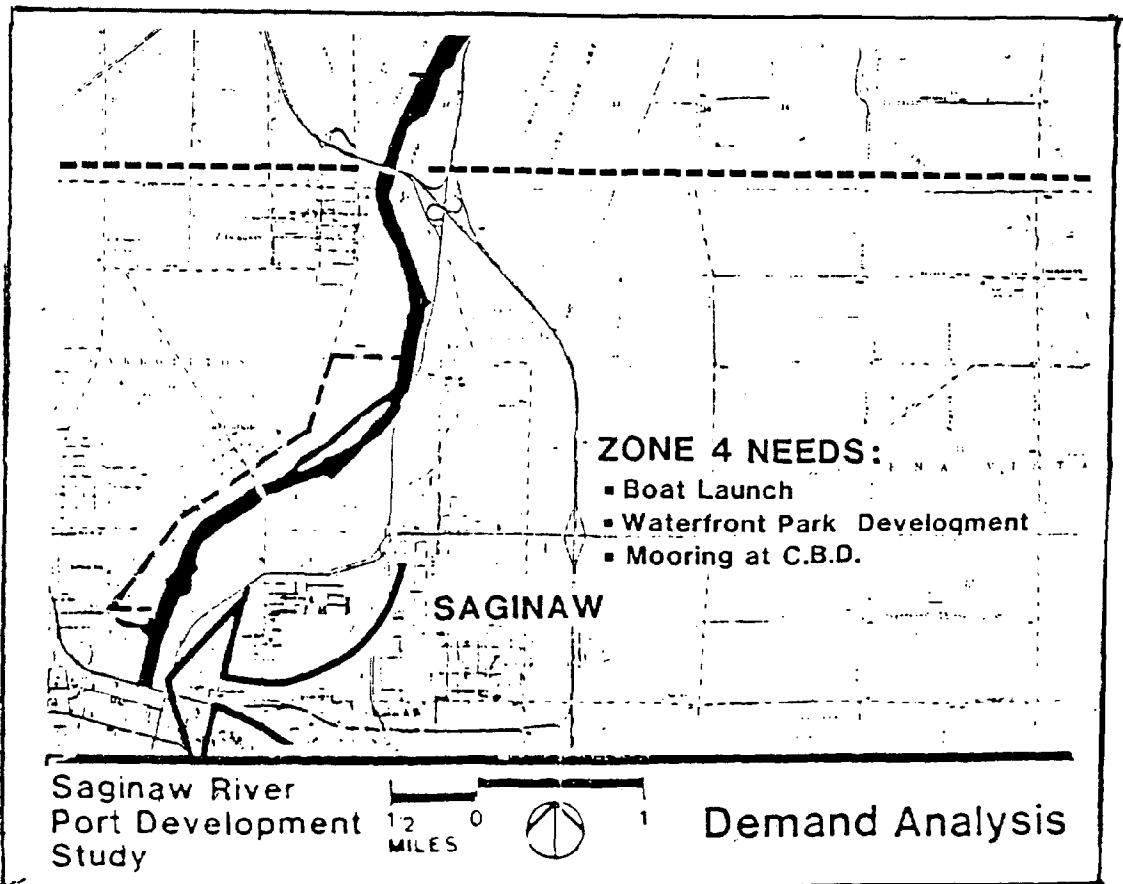


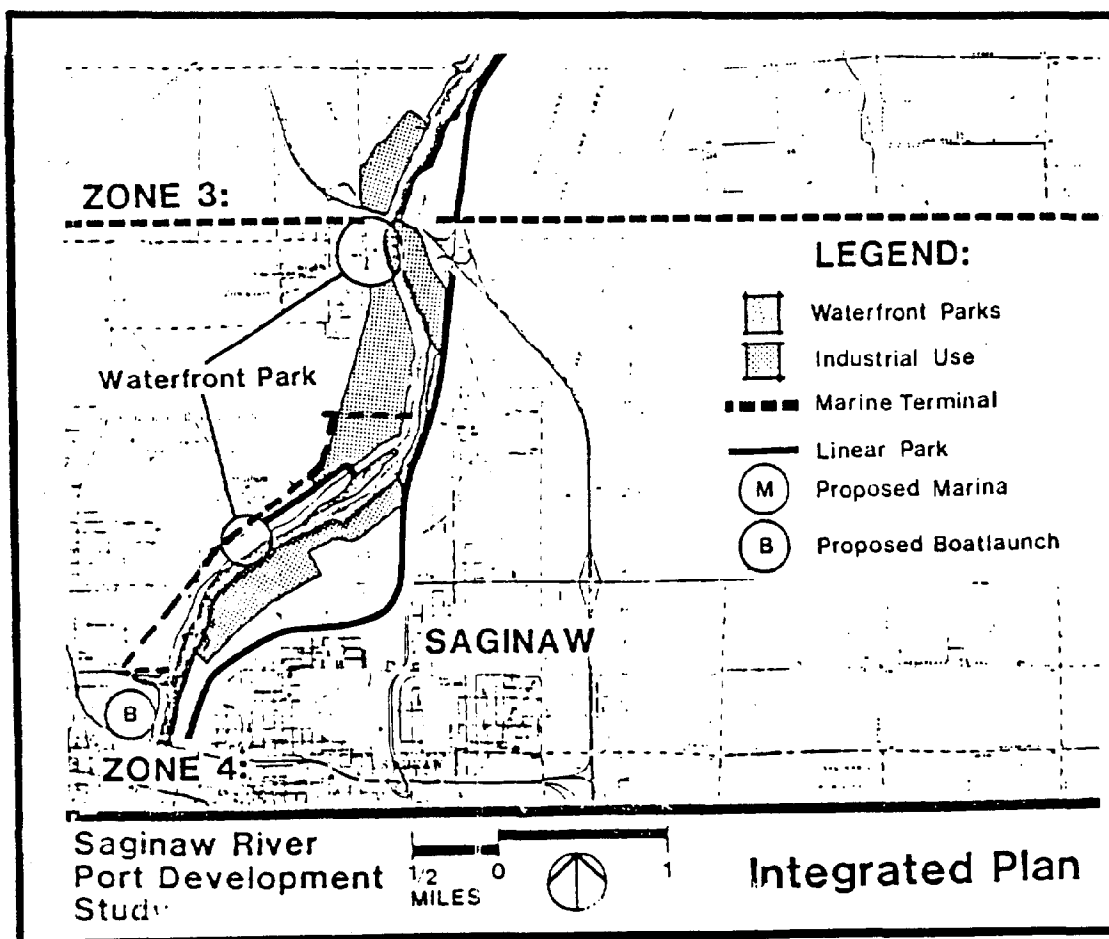
CARROLLTON TOWNSHIP RECREATION FACILITIES

PARKS SUMMARY FOR TOTAL TOWNSHIP: POPULATION - 7,482

(Comparison with National Recreation Association Standards)

ACTIVITY	STANDARD/POPULATION	TOTAL NEED	AVAILABLE	NET NEED	NEED IMPACT
					IF PROJECT IMPLEMENTED
Baseball	1 per 6,000	1	1	0	0
Softball	1 per 3,000	2	4	0	0
Playfields	1 per 800	9	4	5	2
Tennis Courts	1 per 2,000	4	4	0	0
Multi-Purpose Courts:					
Shuffleboard	1 per 1,500	5	0	5	5
Outdoor Pool	1 per 25,000	0	0	0	0
Picnic Areas	1 per 2,500	3	0	3	1
Nature Trails	1 per 2,500	3	0	3	0
Bike Trails	1 per 2,500	3	0	3	0
Camp Areas	1 per 2,500	3	0	3	2
Recreation Center	1 per 20,000	0	0	0 opt.	0
Ice Rinks	1 per 2,500	3	0	3	3
PUBLIC FACILITIES -					
Library		0-1	0	1 opt.	





NOAA COASTAL SERVICES CTR LIBRARY



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